1, In percussive drilling the rock is broken by following action?, crushing, chipping, both, noneofabove, 2

2, The drilling rods are made of?, castiron, steel, Ni-cr, caststeel, 3

3, Which is used for raising and lowering the rods of square section?,BUlldog,sludger,retainingkey,none of the above,3

4, Which is used for raising and lowering the rods of circular section?,Bulldog,sludger,corebarrel,retainingkey,1

5, The sludge or cuttings in the borehole are removed withe help of ?,corebarrel,sludger,retainingkey,bulldog,2

6, The device used to catch broken rods under a joint in the borehole?,crow's foot or spiral worm,sludger,screwfeed,bulldog,1

7, The operation of tracing the broken and lost parts in the hole and withdrawing them to the surface is known as ...?,lining the borehole,drilling,borehole survey,fishing the borehole,4

8, What is the purpose of lining the borehole?,to prevent caving of sides,to prevent water percolation,to easy drilling operation,none of the above,1

9, The percussive drilling is applicable upto max depth of ....m?,200,300,500,700,2

10,Diamond drilling is applicable upto a max depth of .....m?,500,1000,3000,5000,3

11,Manual drilling is possible upto max depth of.....m?,15,30,45,60,2

12,The core(dia in mm) size obtained with NX size?,21,28,40,54,4

13,The feed mechanism is not necessary beyond the depth of....m?,30,40,50,60,4

14,Single tube core barrel is suitable for recovering core from rocks of ?,soft,friable,homogeneous,hard,3

15,Double tube core barrel is suitable for rocks of ?,hard,homogeneous,soft and friable,none of the above,3

16,Bore hole deviation is .....deg for 30m?,1,2,3,4,2

17,Bore hole survey means..?,Measurment of deviation,Measurment of depth,Measurment of time taken,None of the above,1

18,In etch method which acid is used to measure borehole deviation?,sulfuric acid,hydrocloric acid,nitric acid,Hydrofloric acid,4

19,Bentonite chemical is used for ?,sealing cracks,preparing mud flush,surveying bore hole deviation,none of the above,2

20,The improved technique of removal of core during drilling without raising the drill rods?,Double tube core barrel,X-ray drilling,wireline drilling,side coring,3

21,Controlling the coarse of a borehole so as to follow predetermined path is ...?,Deviation of borehole,wireline drilling,control drilling,directional drilling,4

22,The starting point of shaft at the ground surface is called..?,collar,pithead,platform,scaffold,1

23,Ventilation by mechanical means is provided in sinking shaft exceeding depth of...m?,30,25,40,15,2

24,The device used to prevent undue swinging of the bucket in sinking shaft?,spider,kibble,scaffold,rider,4

25,The safety device is provided in sinking shaft in case of overwind?,spider,kibble,detaching hook,rider,1

26,In blasting in shaft sinking the number of holes are....times the dia of the shaft in m?,2,3,4,1,2

27,The quantity of ventilating air(cu.m) shall be provided in siking shaft if depth exceeds 25m?,100,200,300,400,3

28,Upward drivage of shaft is carried out for a distance upto ...m?,15,25,35,45,1

29,A permanant lining where running sand is encountered during sinking is..?,Cementation,piling,concrete lining,tubbing,4

30,The method of sinking through loose deposits of sand upto 20m is ?,piling system,open caison,tubbing,cementation,1

31,The method of sinking through loose deposits of sand upto 60m is ?,piling,open caison,forced drop,cementation,2

32,The method of sinking through alternate loose and tough strata upto 60m?,piling,open caison,forced drop,cementation,3

33,The method of sinking where there is ground filling problem or considerable inrush of water uptp depth of 30m?,piling,open caison,Pneumatic caison,forced drop,3

34,The method of sinking in unstable or friable strata with heavy inrush of water?,tubbing,forced drop,cementation method,freezing method,4

35,In freezing method of shaft sinking which is used for circulation?,HCl,HNo3,CaCl2,NaCl,3

36,In freezing method os sinking the removal of ice wall after completion of siking by sending hot brine through holes is known as ..?,defreezing,silicatisation,postfreezing,thawing,4

37,The method of sinking tused through any fissured water bearing strata except in running sand is..?,pneumatic caison,cementation,forced drop,piling,2

38,The process of treating holes with chemicals in cementation method is called?,defreezing,silicatisation,presilicatisation,thawing,2

39,The holes treated with chemicals are called?,treating holes,test holes,product holes,weeping holes,3

40,In cementation method the purpose of treating holes with chemicals-silicate of soda and alluminium sulfate is ..?,To reduce the friction,To seal cracks,quick setting of cement,none,1

41,The usual inclination for the inclines is ..?,1in3,1in2,1in4,1in1,3

42,An underground roadway through stone connecting 2 or more coal seams is ..?,tunnel,crossmeasuredrift,crosscut,staplepit,2

43,For a coal seam of moderate dip the shaft may be located in the .... of the property?,rise,middle,dipside,1/3from outcrop,2

44,The mode of entry shall be by shaft if the coal seam lying depth of more than by minimum.....m?,20,30,40,50,2

45,As per indian standerds thick seam means having seam thickness ..?,1.5-4.5m,0-1.5m,4.5-9m,above 9m,3

46,As per indian standerds steep mines means having seam dip(in deg)..?,0-5,5-18,18-40,above 40,3

47,As per indian standerds deep mines means if the seam lying depth from surface is..?,Less than 200m,200-450,450-600m,above 600m,2

48,In deg I mines the % of inflammable gas is ..?,lessthan 0.1,0.1to1,1-10,above10,1

49,A gallery which cuts acroos the pillers due to its drivage along an apperent dip is called..?,crosscut,leval,dip,drift,1

50,The max width of the gallery in indian coal mines is ....?,3m,4m,4.8m,5.5m,3

51,The travelling road height should not be less than ...?,1m,1.8m,2.5m,3m,2

52,The minimum piller to piller distance if the depth of seam is 250m and gallery width is 4.2m?,34.5m,30m,39m,45m,3

53,The minimum piller to piller distance if the depth of seam is 150m and gallery width is 3.6m?,16.5m,19.5m,25.5m,13.5m,2

54,The min pillar distance from center to center;if the depth of seam is 450m and gallery width is 4.8m?,39m,45m,48m,52m,3

55,The % of extraction if the depth of seam is 300m and gallery width is 4.2m?,11,15,17,20,4

56,The % of extraction if the depth of seam is 200m and gallery width is 4.8m?,33,25,20,40,2

57,The max length of the trailing cable is .....m?,50,90,150,200,2

58,Capacity of slusher is ..tph?,30-40,40-60,10-20,70-100,1

59,A landing or platform in a shaft including an excavation between top and bottom of the shaft is called?,midsetlanding,inset,collar,cover,2

60,The process of conversion of chemical energy into heat and mechanical energy is called...?,oxidation,combustion,detonation,none of the above,1

61,The amount of energy released by an explosive during blasting is called..?,Density,Strength,Sensitivity,VOD,2

62,The rate at which the detonation wave passess thorough the column of explosive is called?,Density,Strength,Sensitivity,VOD,4

63,Shuttering effect is obtained with the explosive having ?,higher VOD,medium VOD,slower VOD,without VOD,1

64,Which is the low density explosive?,Gunpowder,NG,slurry,ANFO,1

65,Hazard performance initiation propagation are related to one of the characteristics of an explosive?,VOD,Stability,Sensitivity,Density,3

66,The important characteristic of an explosive which will give an idea about heat and humid condition and time of explosure?,resistance,stability,sensitivity,density,2

67,The composition of Gunpowder is(charcoal:sulphur:potasium nitrate in %)?,15:10:75,25:10:65,10:15:65,15:75:10,1

68,Which explosive is blasted by safety fuse?,ANFO,slurry,NG,Gunpowder,4

69,To avoid freezing of NG explosive which agent is mixed?,PETN,TNT,DI-NITRO-GLYCOL,ASA,3

70,The VOD of premix is?,5000 m/s,7000 m/s,3500 m/s,3200 m/s,2

71,A chemical component having 3 properties-High explosive and Oxidising agent and cooling agent is?,NG,Liquid oxygen,TNT,AN,4

72,The VOD of OCG is ?,5000 m/s,7000 m/s,6000 m/s,3500 m/s,3

73,In ANFO explosive the % of diesel oil is mixed for effective oxygen balanced explosive mixture is?,4-5%,5-6%,6-7%,7-9%,2

74,The VOD of ANFO is ?,3500 m/s,3000 m/s,6000 m/s,3200 m/s,4

75,The amount of diesel oil mixed for 100kg of AN is(dryseason and wet seanson)?,5 and 6,6 and 7,7 and 9,10 and 12,3

76,What excess % of diesel oil will lower the sensitivity?,6 %,7 %,8 %,9 %,3

77,In ANFO the water content should not be more than?,6 %,7 %,8 %,9 %,4

78,The constuients in slurry explosivie(TNT:AN:Water)?,20:15:65,20:65:15,15:20:65,65:15:20,2

79,The reducing agent in slurry explosive is ?,TNT,AN,Water,starch,1

80,The gelling agent in slurry explosive is..?,TNT,AN,Water,starch,4

81,Atleast how much % the packed explosives are less effective than bulk explosives?,10,15,20,25,2

82,The sensitiser in Emulsion explosive is ?,AN,TNT,starch,microsphers,4

83,The VOD of Emulsion explosive is?,5 km/s,3 km/s,3.5 km/s,7km/s,1

84,The VOD of slurry explosive is ?,5 km/s,3 km/s,3.3 km/s,7km/s,3

85,With permitted explosive the duration of flame is?,1/100th second,1/100th minute,1/1000 th second,none,3

86,Sheathed explosive coated with a sheath of?,Nacl,caco3,NaHCo3,NaCo3,3

87,In the detonator the priming charge is?,PETN,TNT,ASA,AN,3

88,Safety fuse consist core of..?,AN,Gunpowder,TNT,none of the above,2

89,The burning speed of the safety fuse is?,100-120 m/s,100-120 s/m,100-120 m/min,100-120 min/m,2

90,Detonating fuse consist core of..?,PETN,TNT,ASA,AN,1

91,The VOD of Detonating fuse is...?,2000 m/s,3200 m/s,6000 m/s,6500 m/s,4

92,The VOD of Nonel is.....?,2000 m/s,3200 m/s,6000 m/s,6500 m/s,1

93,The detonator used in electrical storms where static electricity is there?,Nonel,Raydet,Ordianary detonator,none of the above,1

94,An instrument to test the continuity of an electric circuit for firing system is?,galvanometer,exploder,blastometer,ammeter,3

95,The tool that is used for cleaning and detection of crack in a shot hole is ?,crimper,scraper,pricker,primer,2

96,The length of shot firing cable in OCP should not be less than..?,18m,30m,40m,50m,2

97,Magazine should be away from all building atleast.....m?,50,75,95,120,3

98,The hole should terminate ....m below if immediate roof is shale?,0.3m,0.2m,0.1m,0.15m,1

99,The depth of hole is restricted to 50%-60% of the width of the drift in ..?,fan cut,drag cut,burn cut,pyramid cut,4

100,The pattern of cut mostly preffered in tunnels and drifts of small area is ?,fan cut,pyramid cut,burn cut,coramant cut,4

101,For irregular ore bodies the preffered drilling pattern is?,Ring drilling,fan cut,pyramid cut,burn cut,1

102,The pattern of cut mostly preffered for laminated strata is?,Ring drilling,fan cut,pyramid cut,burn cut,2

103,In general each shot hole in round u/g covers an area of(sq.m)?,0.1,0.1-0.2,0.3-0.5,0.5-1,3

104,The powder factor with solid blasting is(te of coal/kg of explosive)?,1-2,1.5-2.5,2-3,2.5-3.5,2

105,In hard rocks the spacing and burden vary from .....times the height of the bench?,0.3-0.4,0.5-0.6,0.7-0.8,0.9-1,1

106,while using non incentive delay detonators in BOS the max delay period(milliseconds) btw 1st and last shot in deg 1 and 2 is 'X' and deg 3 is 'Y'.Then X:Y is?,150:100,100:150,200:150,150:200,1

107,The delay period btw 2 consecutive shots with different delay numbers will not exceed ?,50ms,60ms,70ms,80ms,2

108,Relieving hole should be drilled atleast ....m away from the misfired hole in u/g?,1,0.5,0.3,0.2,3

109,The VOD of LOX?,5000 m/s,3500 m/s,7000 m/s,6000 m/s,1

110,The explosive charge per hole in BG method?,2 - 3 kg,1 - 2 kg,3 - 4 kg,4 - 5 kg,1

111,The elements in the delay element of short delay detonator?,Antimony and potasium permanganate,Redlead and silicon,silicon and Antimony,none of the above,2

112,The main element in Fuse head of detonator is..?,AN,DI-nitlo glycol,TNT,Lead Mononitro resorcinal,4

113,In controlled blasting the fly rock should not go height more than?,3m,4m,5m,6m,1

114,The PETN booster occupies only ....% of the total explosive charge?,1 - 2,2 - 3,3 - 4,4 - 5,1

115,The peak particle velocity should not increased ...mm/sec?,10,20,30,40,1

116,The permitted explosive used in u/g in BOS of all gassimines?,Ajax-G,Unisax-G,Soligex,Solimax,3

117,To control the fly rock the blasting technique adopted is?,cushion blasting,muffled blasting,coyote blasting,pop shooting,2

118,To get lumpy coal or to minimize th coal dust the blasting technique adopted is?,cushion blasting,muffled blasting,coyote blasting,pop shooting,1

119,The current required for the ignition of the fuse head is?,2 amp,1 amp,0.5 amp,3.5 amp,3

120,Safety tests carried out for?,slurry explosive,emulsion ,NG,ANFO,1

121,If the bedded planes are seperated by more than 1.2 m apart then the rocks are said to be ?,Massive,Bedded,Flaggy,rubble,1

122,The rocks said to be flaggy if the bedded planes are seperated by..?,more than 1.2m,1m-1.2m,75mm-1m,less than 75mm,4

123,The weight of the rocks in coal mining areas exerts a pressure nearly per metre depth from the surface is ..?,1 kg/sq.cm,0.5 kg/sq.cm,0.2 kg/sq.mm,0.2 kg/sq.cm,4

124,The immediate roof is called..?,3m above the seam,6m above the seam,6m below the seam,3m below the seam,2

125,Phenomena of the rocks in imediate roof bend downwards under their own weight and tend to separate from one another is known as ..?,subsidence,pressure arch,bed separation,roof bending,3

126,The pressure arch in L/W workings have its aprex or crest at a min height above the seam at nearly .... times the length of face?,1,2,3,4,2

127,The depression of ground surface and the structures is called?,subsidence,pressure arch,bed separation,roof bending,1

128,L/W faces with caving have caused difficulties in roof control ar depth of less than nearly..?,100m,200m,300m,400m,1

129,For testing a speciman in laboratory the length:dia ratio should be..?,more than 1:2,more than 2:1,less than 2:1,less than 1:2,2

130,The best method of mining for controling the subsidence is..?,Bord and piller,Longwall with stowing,Longwall with caving,Hormonic mining,4

131,Compressive strength of coal is?,13.5 kg/sq.mm,2.25 kg/sq.mm,2.25 kg/sq.cm,13.5 kg/sq.cm,2

132,Crushing strength of sand stone is?,13.5 kg/sq.mm,2.25 kg/sq.mm,2.25 kg/sq.cm,13.5 kg/sq.cm,1

133,By tappering the prop at the foot or top by providing a lid on the top of the prop.....could be obtained?,max strength,Yield,max life of the prop,none of the above,2

134,The maximum height of the roof that can be tested by bamboo?,2.5m,3m,1.5m,3.5m,1

135,A timber prop is expected to support in area of about.....all round?,1 - 2 m,0.1 - 0.3 m,0.2 - 0.4 m,0.4 - 1 m,4

136,If the prop has to be set on looseground it should be placed on a flat base piece having thickness not less than..?,2 cm,3 cm,4 cm,5 cm,4

137,The timber prop available max height upto..?,3m,6m,9m,11m,3

138,For equal resistance to crushing and bending the prop should have dia ..?,1/3 of the length,1/6 of the length,1/9 of the length,1/12 of the length,4

139,Freshly exposed roof after blasting is effectively and quickly supported by..?,Timber supports,Roof bolts,Safari supports,Bars,3

140,The phenomena of liftin up of the floor If the floor is weak is called..?,Heave,Creep,Bending,none of the above,1

141,On account of the weight of the rocks the pressure arch is transmitted to abutment if the depth of coal seam is ....the length of the pressure?,Equal,Twice,Thrice,4 times,2

142,The load on a prop when upper member is begins to slide is called?,Load bearing capacity,Setting load,Yeild load,Limit load,3

143,The load at which on axially loaded prop reaches its elastic limit or at which it begins to buckle is called?,Load bearing capacity,Setting load,Yeild load,Limit load,1

144,In hydraulic oil the % of emulsion oil is?,2,3,4,5,4

145,The number of props required to support one square metre of the roof area is?,one,two,three,prop density,4

146,The max gap between two chock shield supports is..?,250mm,200mm,150mm,none of the above,3

147,In roof stiching the face should not be advanced more than ....m from the last tensioned rope?,4m,3m,2.4m,2m,3

148,The anchorage support of the roof stiching is ?,5 te,7 te,10 te,12 te,3

149,In resin capsule the mixture hardens within .... seconds and become solid?,20 - 30,30 - 40,40 - 50,50 - 60,2

150,Bulk strength of the timber prop is ...(kg/sq.cm)?,150-230,100-150,250-300,none of the above,1

151,The inclination of prop to the vertical when set to side support is ?,10 - 14 deg,14 - 20 deg,20 - 25 deg,25 - 30 deg,2

152,The yeilding props which exerts resistance with continuous increase in yield are called?,Early bearing supports,Late bearing supports,Hydraulic supports,none of the above,2

153,The anchorage support of resin capsule is?,6te,8te,10te,12te,2

154,Hand packing is usefull upto max gradienat ?,35 deg,30 deg,25 deg,20 deg,3

155,Hydraulic stowing is not successful where the seam is less than ...m depth and flatter than ...deg?,200 ; 5,100 ; 5,100 ; 10,200 ; 10,2

156,In sand stowing generally the sand required for one te coal extraction in virgin area?,1.3 te,2 te,2.5 te,3 te,1

157,The sand input to bumker is calculated by?,venturimeter,kentmeter,lea recorder,none of the above,3

158,The life of the C.I pipes used in sand stowing is.....lac ton of sand?,1 - 4,4 - 8,8 - 12,12 - 16,2

159,The life of the M.S pipe used in sand stowing is.....lac ton of sand?,4,6,8,10,2

160,Which portion of pipe damaged more in sand stowing?,upper portion,middle portion,2/3 from the top,lower portion,1

161,The upper portion of the sand stowing pipe is generally changed after the transport of ....lac ton of sand?,1 - 2,2 - 4,4 - 6,6 - 8,2

162,IN sand stowing incorrect profile will effect..?,cavitaiton,wear on pipes,setup pulsation,jamming,1

163,IN sand stowing high local velocity of sand results?,cavitaiton,wear on pipes,setup pulsation,jamming,2

164,In hydraulic sand stowing the H/L ratio for reasonably good stowing rate?,1:5,1:6,7:1,1:7,4

165,In hydraulic sand stowing the pipe end should away from the dip of the boxing is ?,5 m,6.5m,7.5 m,9m,3

166,In hydraulic sand stowing the throw of the sand without nozzle is ...m and with nozzle is ...m?,2 ; 6,3 ; 7,4 ; 8,5 ; 9,2

167,To stop the stowing which is done to avoid the jamming of the pipe ?,water should be stopped first,sand should be stopped first,both should be stop at a time,none of the above,2

168,For deeper mines the sand:water ratio in sand stowing is?,1:1,1:3,3:1,1:1.3,4

169,The required water for 1 te of sand in hydraulic sand stowing?,800 liters,900 liters,1100 liters,1300 liters,3

170,The stowing rate in hydraulic sand stowing is?,60-80 tph,80-100 tph,100-120 tph,120-140 tph,2

171,The size of the largest particle of the sand does not exceed if the dia of the pipe is D is ?,1/2 of D,1/3 of D,1/1.5 of D,D,2

172,The min velocity of the slurry in the pipe should be.....?,1 m/s,2 m/s,3 m/s,4m/s,2

173,In hydraulic sand stowing the operations are conducted such that not more than .....sq.m of roof area is exposed in any working area at a time and not more than.... such places are left unstowed?,60;1,70;2,80;1,80;2,4

174,The line of extraction is best suited for hydraulic sand stowing is?,step diagnal,diagonal 45 deg,parellel,diagnal 60 deg,1

175,The stowing efficiency in hand packing is?,50 %,73 %,60 %,70 %,1

176,The stowing efficiency in pneumatic sand stowing?,50 %,73 %,60 %,70 %,4

177,The stowing efficiency in hydraulic sand stowing?,50 %,73 %,60 %,70 %,2

178,The stowing efficiency in Mechanical sand stowing?,50 %,73 %,60 %,70 %,3

179,The discharge velocity of the sand in pneumatic sand stowing?,2 m/s,10 m/s,15 m/s,20 m/s,3

180,The stowing rate in Mechanical sand stowing?,50-60 tph,60-70 tph,70-80 tph,80-90 tph,1

181,There was no movement at the surface untill the face advances upto....m?,15m,22m,30m,35m,2

182,The face must advance by approximately a distance of ....times the depth of the seam for the full subsidence to take place?,1.4,1.8,2.5,3,1

183,The angle of inclination from vertical of the line connecting the edge of the workings and the edge of the subsidence area is called?,Angle of fracture,Angle of draw,Breaking angle,hade,2

184,If the full subsidence is occured more than one point then the subsidence is called?,critical subsidence,subcritical subsidence,supercritical subsidence,trough subsidence,3

185,The angle of draw in indian coal fields?,upto 25 deg,upto 35 deg,upto 40 deg,upto 45 deg,2

186,With hydraulic sand stowing of the goaf the subsidence can be reduced to about ....of the amount caused by caving?,1/2,1/3,1/4,1/5,4

187,The critical width of extraction at which the subsidence at the bottom of the trough has a maxmimum possible value is?,equal to depth,1.3 X depth,1.8 X depth,2 X depth,2

188,The minimum thickness of the coal seam for adopting Bord and pillar method of mining?,1.0 m,1.5 m,2.0 m,2.5 m,2

189,A face or working place which is parallel to main cleat is said to ?,on end, end cleat,bord cleat,wall,4

190,The water bearing quality of a seam is measured by the ?,quantity of water pumpued in a year,total HP of the pumps installed,rate of pumping per

hour,ratio between the quantity of water pumped and tonnes of coal produced,4

191,In Indian mines the ratio of the quantity of water pumped from u/g workings to the quantity of coal produced varies?,1 to 4,1 to 20,1 to 100,1 to 200,1

192,The gradient in the cross cut should not be less than?,1 in 4,1 in 8,1 in 10, 1 in 12,4

193,The average number of faces in a district if number of headings are 'N'?,2N-1,2(N-1),N-2,2(N-2),1

194,Coal mine operations are prohibited if the common boundary is within ?,15m,10m,7.5m,5m,3

195,Coal mine operations are prohibited if the cover is less than ?,20m,15m,30m,25m,2

196,Coal seams said to be contiguous if the two seams are separated by a parting of less than ?,3m,6m,9m,10m,3

197,The minimum distance between two sections should be if one working at floor and one at top?,3 m,4 m,5 m,6 m,1

198,Drivage of two sets of roads and forming of pillar is known is?,Working in the broken,Working in the whole,Longwall retreat,Slicing,2

199,Working coal in the pillars formed in the operation in bord and pillar mining is ?,Working in the broken,Working in the whole,Longwall retreat,Slicing,1

200,The galleries driven through the pillar for forming stooks are called?,stooks,splits,slices,judd,2

201,The pillars formed during development are split into small pillars are called?,stooks,splits,slices,judd,1

202,The pillar is splitted into 2 or more stooks if the pillar size is more than?,15 X 15 sq.m,18 X 18 sq.m,20 X 20 sq.m,25 X 25 sq.m,2

203,Once the pillar extraction is commenced the splitting is of pillars may be done upto.....pillars ahead of the pillar is under extraction?,1,2,3,4,2

204,During development the height of the gallery should not exceed?,2m,3m,4m,5m,2

205,During extraction of coal the minimum thickness of the coal(rib) is left against the goaf is?,1 m,2 m,3 m,4 m,1

206,With a good sandstone roof the area exposed may not more than .....sq.m at one stook extraction and ......sq.m if 3-4 stooks under extraciton?,20 ; 400,30 ; 600,40 ; 900,50 ; 900,3

207,The fall which takes place soon after whithdrawal of supports is called ?,Local fall,Main fall,Air blast,Rock burst,1

208,During depillaring if the roof is laminated local fall occurs ....hours after the props are withdrawn?,1-3,3-6,4-10,10-14,3

209,Main fall occurs When the area of extraction is nearly equal or more than the .....of the depth?,twice,thrice,square,cube,3

210,Upto what gradient the Bord and pillar mining can be adopted withour special arrangements?,1 in 3,1 in 4,1 in 5,1 in 6,2

211,If the pillars are not strong they may be crushed due to sudden pressure is called?,premature collapse,normal collapse,local fall,overriding of pillars,4

212,In which line of extraction one solid stook intervenes between two stooks under extraction at a time?,Diagonal,Step diagonal,parallel to strike,Arrow head,2

213,In which line of extraction the pillar or stook is under excessive pressure and is liable to crush?,Diagonal,Step diagonal,parallel to strike,Arrow head,4

214,If the depillaring is proceeding from dip to rise and seam inclination is not mild so that goaf can be submerged in water then the line of goaf is?,Diagonal,Step diagonal,parallel to strike,Arrow head,3

215,In shallow seams to prevent breathing of air to the depillared area through cracks to the surface the cracks have to be blanketed with a minimum thickness of layer of sand or earth nearly?,1m,1.2m,1.5m,2m,2

216,The sudden release of elastic strain energy stored in the pillars results violent burst of coal pillars is called?,Air blast,Bumps,Rock burst,Main fall,2

217,Headings advancing in a direction at right angels to the main cleat are called?,bords,end places,walls,splits,1

218,The method suitable for working seam under the workings of another seam which is water logged or on fire is?,Longwall retreat,Bord and pillar,Hydraulic mining,Longwall advancing,2

219,The method suitable for workings seam under the surface containing valuable property water bodies for whose protection some coal is left unworked is ?,Longwall retreat,Bord and pillar,Hydraulic mining,Longwall advancing,2

220,The width of the headings in bord and pillar method of working depends on?,depth of working,size of the pillars,face machinary used,ventilation required,3

221,With strong roof and unyielding floor tends to?,Crush the roof,Heave the floor,Cruch the sides of pillars,Spontaneous heating,3

222,The shape of the pillar that gives maximum percentage of recovery with speed reduced amount of lift for loading is?,square,rectangle,rhombus,circular,2

223,The shape of the pillar in steep seams for haulage and loading and in flat and inclined seam for adoption of high capacity machinary like shuttle cars and locomotive is ?,square,rectangle,rhombus,circular,3

224,For given perimeter the greatest area of support is offered by ?,square,rectangle,rhombus,circular,1

225,In deciding the size of the panel the important factor to be considered is?,thickness of the seam,output required,depth of the seam,incubation period,4

226,The number of panels to be opened at a time is decided by ?,Capacity of the direct rope haulage,Output desired,Thickness of the seam,Incubation period,1

227,In a seam with locomotive haulage system the junctions with main headings are staggered ?,For easy travelling of loco,to minimize roof exposure,to reduce ventilation air loss,none of the above,2

228,Heavy roof fall and even premature collapse may taken place if line of goaf is?,parallel to strike,diagonal,right angle to fault,parallel to fault,4

229,Shuttle cars are the transporting media for ?,Longwall,Bord and pillar,Open cast,Hydraulic mining,2

230,The groove made by coal cutting machine is called as ?,web,cuthole,channel,none,1

231,The minimum factor of safety in design pillar in bord and pillar mining?,1,2,3,4,2

232,For designing pillars.....is used?,coward's diagram,proximate analysis,nomographs,none of the above,3

233,The daily advance in development of galleries by continuous miner?,20m,30m,40m,50m,3

234,Maximum roof exposure for caving is?,30 to 50 sq.m,60 to 90 sq.m,90 to 100 sq.m,100 to 120 sq.m,2

235,Maximum roof exposure for stowing is?,30 to 50 sq.m,60 to 90 sq.m,90 to 100 sq.m,100 to 120 sq.m,3

236,The maxmimum compressive strength of cavable roof?,300 kg/sq.cm,400 kg/sq.cm,500 kg/sq.cm,600 kg/sq.cm,3

237,The limiting depth for the bord and pillar mining is?,200 m,300 m,400 m,500 m,2

238,Heading advancing parallel to cleats are called?,bord,wall,slice,none,2

239,The percentage of extraction of coal from a pillar of 30m x 30 m center to center with roadways 4m wide is ?,30,28,22,25,4

240,While working seams steeper than 1 in 4 except the haulage dip the cross connections between the levels should be?,on mild gradient,provided with steps,straight aligned,staggered,4

241,Overriding of pillars and stooks and premature collapse in the depillaring area is due to presence of?,Weak strata,Water bearing strata,Strong thick massive sandstone,strong coal,3

242,The first indication of roof weighting for regular fracturing roof in goaf is?,Prop when tapped with stick produce dull and dummy sound,lid over the prop bends,rumbling sound in goaf,penetration of prop into floor,1

243,The limiting gradient for longwall method is?,0 to 20 deg,10 to 30 deg,20 to 40 deg,30 to 40 deg,1

244,In longwall advancing the gate roads extend slightly beyond the face and the extended portion of the gate is called?,Buttok,Tail gate,Stable,Packwall,3

245,The walls by which the roof over the goaf is partially or completely supported are called?,Stalls,Ribs,Packwalls,None,3

246,In longwall advancing stables are usually ... ahead of the face?,6 - 8,8 - 10,4 - 6,10 - 12,2

247,A face is along the strike is preferable for stowing in seams dipping more than ?,1 in 10,1 in 8,1 in 6,1 in 5,4

248,Where sand stowing is adopted for stowing the goaf the maximum distance between the packed goaf edge adn the face is restricted generally....m for proper roof control?,3m,5m,6m,8m,3

249,The face formed which is developed on bord and pillar method and extracting in longwall retreating with stowing is called?,Z shape face,Barry face,stable,none of the above,2

250,The width of the workings from the goaf line to the face is called?,stall,span,stable,Buttock,2

251,The portion of the face at its end from where cutting starts is called?,stall,span,stable,Buttock,4

252,The conveyor which recieves coal from the face conveyor for its transport outbye is called?,Gate conveyor,Stage loader,lump breaker,None,2

253,The face adavances towards rise side is possible in Longwall if the seam inclination is ?,less than 10 deg,more than 25 deg,less than 25 deg,less than 30 deg,3

254,Tail gate is supported by hydraulic props with I section channel bars ?,Upto 20 m from the face,Upto 30 m from the face,Upto 100 m from the entrance of tail gate,Upto abutment distance from the face,2

255,Bord and pillar method is applied when a seam is?,Outcropping,at shallow depth,at moderate depth,at greater depth,3

256,The most common length of face in longwall mining system is?,30-100 m,60 - 200 m,90 - 300m,100 - 400 m,2

257,The time taken to settle the goaf is ?,1 to 2 years,2 to 3 years,3 to 5 years,5 to 7 years,3

258,Seams with dirt bands are worked by?,Bord and pillar method,Longwall method,Opencast method,Hydraulic mining,2

259,Where the gate belt conveyor is centrally situated to serve two adjacent longwall faces progressing in the same direction the combined face is known as?,Single unit face,Double unit face,Barry face,None of the above,2

260,while working contiguous seams ventilation may be through?,Bore holes,Main shafts,Stable pit,Lower seam only,3

261,Direction of the longwall face advance towards the dip side is possible only when gradient of the seam is ?,slightly or nearly flat,upto 25 deg,45 deg, 60 deg,1

262,With AFC the length of single unit face commonly?,80m,100m,160m,200m,2

263,The optimum length of face from the consideration of the capacity of the face machinary is determined on the basis of?,Type of machinary,Combination,Complete number of cycles per day,Total delays due to breakdown,3

264,The machine which cuts the coal while travelling in one direction and loads on return travel is?,shortwall coal cutter,longwall coal cutter,plough,shearer,3

265,With DERDS the diameter of the drum is ..... of the total extracted height?,30 %,50 %,70 %,90 %,3

266,With DERDS the cut coal is thrown on to the AFC by ?,centrifugal force,by the movement of the machine,by the gummer,Cowl,4

267,If hydraulic sand stowing of the goaf is adopted and the face is along the strike it should be slightly oriented at.....to provide drainage of water?,1 in 120,1 in 150,1 in 175,1 in 100,4

268,The seam thickness is suitable for coal plough operation?,0.2 to 1m,0.6 to 2m,1 to 3m,3 to 5 m,2

269,The method of mining which is not suitable for working coking coal seams is?,Longwall mining,Bord and pillar,Room and pillar,Hydraulic mining,3

270,The width of the rooms in the room and pillar method may be normally?,4 - 6 m,5 - 7 m,6 - 9 m,8 - 10 m,3

271,The length of the rooms in room and pillar method is ?,90 m,70 m,50 m,40 m,1

272,The value of the threshold convergence in longwall mining is .....mm / m?,30,40,50,60,2

273,Limiting gradient for the longwall mining is ?,1 in 2,1 in 3,1 in 4,1 in 5,2

274,The roads driven parellel to the strike in horizon mining are called?,Laterals,Cross cuts,levels,none,1

275,The minimum life of the mine should be more than.....years for adopting horizon mining?,10,20,30,40,3

276,The thickness of the one slice in multisection extraction of thick seams?,1.5 - 2m,2 -2.5m,2.4 - 3m,3 -3.5m,3

277,Inclined slicing in decending order is applicable if the seam inclination is ?,less than 35 deg,more than 35 deg,less than 45 deg,none,1

278,Roadway reutilisation is possible in.....longwall face ?,single unit,Double unit,Z unit,none,3

279,Maximum voltage is required for the longwall face?,110v,660v,1100v,3300v,3

280,Horizontal slicing method is applied if the seam thickness is?,less than 15m,more than 15m,less than 10m,more than 10m,2

281,The minimum thickness of the seam for adopting Blasting gallery method is?,5m,7m,10m,12m,2

282,The charge per hole in the BG method is?,3 kg,4 kg,5kg,7kg,1

283,The percentage of recovery in BG method is?,50-60,60-70,70-80,80-90,3

284,The holes in BG method are inclined....deg from the vertival towards the goaf?,20,35,45,60,2

285,In BG method the supports are installed upto.....m from the face?,30,40,50,60,2

286,The method of where the mineral is excavated in small open pits but it is transported to the surface through u/g excavations and transport system is called?,hydraulic,Glory hole mining,open pit mining,none,2

287,The stripping ratio for Manual quarrying is?,1.5 : 1,2 : 1,5 : 1,3 : 1,1

288,The stripping ratio for shovel-dumper combination is?,1.5 : 1,2: 1,4 to 5 :1,8 to 10:1,3

289,The stripping ratio for Dragline?,1.5 : 1,2: 1,4 to 5 :1,8 to 10:1,4

290,The stripping ration for Bucket wheel excavator?,2 : 1,4 to 5:1,8 to 10:1,3 to 4:1,4

291,In formation of benches the angle of slope should not exceed?,80 deg,30 deg,45 deg,60 deg,3

292,If the material is loose or alluvium the bench height should be?,more than 1.5m,less than 1.5m,3m,more than 3m,2

293,The height of the coal bench should not exceed?,2 m,3 m,4 m,5 m,2

294,The height of the bench is decided by ?,Drill machine capacity,height of the dumper,height of the boom of shovel above the floor,5m,3

295,The method involves mining and washing together of unconsolidated or semi consolidated rock wear the ground surface is called?,surface mining,hydraulic mining,glory hole mining,placer mining,4

296,Suitable bench height for 2 cu.m shovel is ?,4 - 6 m,6 - 8 m,10 m,12 m,2

297,Suitable bench height for 3.5 cu.m shovel is?,8 m,10 m,12 m,14 m,3

298,The slope of the high wall is usually ....deg off the vertical?,5,10,15,20,4

299,Gradients of roads in quarries for tyred vehicular traffic should not exceed ?,1 in 4,1 in 8,1 in 10,1 in 15,3

300,The output of the shovel with 2 cu.m bucket is.....cu.m per year?,2.5 lac,4 lac,5.5 lac,7 lac,1

301,The output of the shovel with 4.5 cu.m bucket is.....cu.m per year?,2.5 lac,4 lac,5.5 lac,7 lac,3

302,The shovel can dig below ground upto..?,2.5 m,4m,5m,6.5m,1

303,The output capacity of the dragline with 4.5 to 7.5 cu.m is.....million cu.m per year?,0.1 to 0.2,0.25 to 0.75,1.5 to 1.7,3 to 4.5,2

304,The output capacity of the dragline with 23 to 30 cu.m is.....million cu.m per year?,0.1 to 0.2,0.25 to 0.75,1.5 to 1.7,3 to 4.5,4

305,The limiting gradient for the dragline is?,8 deg,12 deg,16 deg,20 deg,2

306,The jack hammer is used for the drill holes(30mm to 40mm dia) ?,upto 3m depth,upto 6m depth,upto 10 m depth,beyond 10 m depth,1

307,Wagon drill is used for the drill holes having depth of?,upto 3m,3 - 15 m,15 - 25 m,beyond 25m,2

308,The limitation for the inclined drilling is?,10 deg off the vertical,30 deg off the vertical,45 deg off the vertical,60 deg off the vertical,2

309,Jet piercing is suitable only for rocks ?,low strength,laminated,good spallability,none,3

310,For every degree of the angle of inclination with the vertical the saving in explosive consumption is?,1 %,2 %,3 %,4 %,1

311,Where dragline is used before starting excavation of coal a clear space of not less than...m shall be created?,3,4,5,6,4

312,For important haul roads the minimum factor of safety of the slope is?,1,1.5,2,2.5,2

313,When 2 discontimues strike obliquely and intersects on the slope face.....type failure of slope occurs?,plane ,wedge,circular,none,2

314,The fill factor for the Hydraulic shovel is?,75 %,65 %,80 %,90 %,3

315,The depth to which the extraction of mineral is done economically by OCP is called ?,stripping ratio,Breaeven stripping ratio,Quarriable limit,economical depth,3

316,The method of estimation in which the shape and size of the ore can be estimated is called?,Prospecting,Boring,Exploitation,Exploration,1

317,Ripper can be compared with?,Lawn mover,Former's plough,Tracter,none,2

318,The angle of the slope of the bench wall from the horizontal is called?,Bench slope angle,Ultimate pit slope angle,Angle of draw,none,1

319,Horizontal ledges situated on the non productive side of the open pit and serving to accomodate the transportation roads is called?,Trench,Berm,Haul road,none,2

320,For every 1 deg deviation in slope angle changes the volume of the quarried ground by above?,1 % ,2 %,3 %,4 %,4

321,The limiting dip for the shovel dumper combination?,4 deg,5 deg,6 deg,7 deg,1

322,The limiting gradient for the continuous surface miner is ?,5 deg,7 deg,10 deg,12 deg,2

323,The output from the surface continuous miner is.....million cu.m per year?,2,6,10,15,2

324,The dumped over burden is decoaled are should not roll down at coal benches when it assumes?,its momentum,its angle of repose,critical area,critical height,2

325,The machine used for pushing loose material or for digging in earth and sand is?,scraper,shovel,dragline,dozer,4

326,The most suitable machine for ripping soft rocks and medium hard rocks below hardness 5 on mohr's scale which are laminated and stratified is?,dozer,scraper,ripper,shovel,3

327,The machine employed for loading fragmented rock from a bench standing on the floor of the bench is?,tractor shovel,dipper shovel,surface miner,BWE,2

328,The machine best suited for digging below the level on which it stands and loads the dumper is?,tractor shovel,stripper shovel,back hoe,dipper shovel,3

329,The shovel used stripping top soil and making shallow cuts and trenches upto or depth of 3 to 6 m is?,stripper shovel,dipper shovel,tractor,pull shovel,4

330,In respect of dipper shovel "crowding" means?,raising bucket to dumper height,Piercing the bucket into broken mineral,winging the bucket round,moving the shovel from one place to another,2

331,The machine suitable for digging alluvium sandy soil unconsolidated rock or blasted coal or rock and which can dip below the level at which it stands and casts the material over a wide area is?,Hydraulic shovel,Dipper shovel,Tractro shovel,Dragline,4

332,A mounted drill desinged for horizontal drilling is ?,stoper,airleg,drifter,wagon drill,3

333,The machine used for the excavation and removal of soft unconsolidated overburden coal and soft ores in benches of upto 90m is?,Drag line,Hydraulic shovel,BWE,Tractor shovel,3

334,Generally the length of sub grade drilling is?,upto 0.5 m,0.5 to 3 m,3 to 5 m,5 to 6 m,2

335,Terrace cut is given with the help of?,scraper,continuous miner,BWE,dipper shovel,3

336,For good matching of load haul equipment the truck body to shovel bucket capacity ratio should be?,1 -3 times,4 - 6 times,7 - 9 times,10 to 12 times,2

337,Sandy soil is best suited for ?,BWE,Tractor shovel,Scraper,Ripper,3

338,The drill machine used for drilling for vertical holes of 150-300 mm diameter specially in medium hard rocks?,churn drill,jackhammer drill,diamond drill,well hole drill,1

339,The drill that can drill the holes at any angle adn down to depth of 18 to 45 m is?,Electric drill,Wagon drill,churn drill,hand drill,2

340,The drill that can drill holes from 65 to 230 mm dia in hard rocks is?,Electric drill,wagon drill,DTH,churn drill,3

341,The degree of fragmentation in primary blasting can be increased by increasing the sp.charge and decreasing the?,Spacing,Burden,Height,Density,2

342,Which is the modification of the dipper shovel with a long boom and is used for casting fragmented rock or earth into a dump of OB?,BWE,Tractor shovel,Hydraulic shovel,Stripper shovel,4

343,Which is used for stripping top soil and making shallow cuts and trenches upto a depth of 3.5 to 6m?,dipper shovel,Tractor shovel,Ditching shovel,Stripper shovel,3

344,The hole dia of the jack hammer drill is?,upto 40mm,40 - 100mm,60-125mm,150-300mm,1

345,The hole dia of the wagon drill?,upto 40mm,40 - 100mm,60-125mm,150-300mm,2

346,The maximum size of the boulder that can load by shovel is.....times the bucket capacity?,0.4,0.6,0.8,0.9,3

347,Minimum capacity of the bucket in BWE?,200 lit,350 lit,450 lit,500 lit,2

348,The rock which is predominent in the area and which contains orebody is called?,Bedrock,Country rock,Seam,Orebody,2

349,Specific gravity of the earth...gm/cu.cm?,5.5,3.7,6.5,2.7,1

350,The crystalline form of the quartz is?,Hexagonal,Monoclinic,Cubic,none,1

351,The mineral is not scrached by flourspar and scrached by Orthoclase then the hardness of the mineral is?,5,6,7,4,1

352,The protodyaknov strength index of the lignite is?,1 to 1.5,1.5 to 2,2 to 2.5,3 to 4,2

353,The protodyaknov strength index of the coal is?,1,1.5,2,3,3

354,The chemical formula of the magnetite is?,FeCO3,Fe2O3,Fe3O4,Fe2O4,3

355,Mica is a ?,Metallic minearal,Gangue mineral,Non metallic,Precipitate,3

356,Rocks which have cooled at depth had slow rate of cooling resulting coarse crystals called?,Plutonic,Hypabysal,Volcanic,sedimentary,1

357,The rocks are called acid if the silica % is ?,less than 45 %,45 - 55 %,55 - 65 %,More than 65 %,4

358,It is an irregularity where bed thins out generally due to erosion by a river or stream and the roof of the bed is filled up with sand or other material ?,Washout,Roll,Outcrop,Lacolith,1

359,Gabro is ?,Carbonate rock,Sedimentary rock,Metamarphic rock,Plutonic rock,4

360,Dolarite is a ?,Hypabysal rock,Sedimentary rock,Metamarphic rock,Plutonic rock,1

361,Basalt is a ?,Hypabysal rock,Sedimentary rock,Volcanic rock,Plutonic rock,3

362,From surface to depth of 35km is called?,Crust,mantle,core,none,1

363,An inlier is ?,Spread of older rock on younger rocks,surface erosion,older rock exposed in younger rock,bend in rocks,3

364,If the upper younger rocks spread covering the older rock it is known as ?,Unconfermity,Joints,Inlier,Overlap,4

365,The surface erosion or non deposion occuring with in the sequence of rocks is?,Unconfermity,Joints,Inlier,Overlap,1

366,Archean rocks are also known as?,Metamorphic rocks,Sedimentary rocks,Igneous rocks,none,3

367,In bituminous coal the % of the carbon content is?,less than 50 %,50 to 70%,70 to 90 %,more than 90 %,2

368,The metallic content of the ore is called?,Grade,Tenor,Gangue,none,2

369,To study bed rock lying below soil cover 1m adn max 30m deep pits are made is known as ?,Trenching,Pitting,tracing of float,none,2

370,Diamond crytalline system is?,Isometric,monoclinic,Hexagonal,cubic system,1

371,Parent rock of mica is?,Amphobole,Pegmatite,Orthoclase,none,2

372,Carboniferrous system falls in group?,Keinozoic,Mesozoic,Palaeozoic,Azoic,3

373,Upper gondwana are characterised by?,Glessopteris flora,cyoas,Philonphylum flora,Rajamahal flora,4

374,Saddle reefs are formed by?,Metasomatism,Hydrothermal process,Sedimentation,Magmetic process,2

375,Dykes are?,concordant form,phacoliths,Discordant form,sills,3

376,Silica in the form of very resitant mineral quartzeis the dominent mineral constiuent of?,conglomarate,limestone,dolamite,sandstone,4

377,Hornblende belongs to the group of?,Mica,Amphibole,Pyroxene,Felspar,2

378,Leaching of ore components and their subsequent concentration at lower depths is known as?,Placer deposition,secondary enrichment,Hypothermal deposition,sedimentary deposition,3

379,The streak of graphite is?,black,cherry red,green,none,1

380,The streak of hematite is?,black,cherry red,green,none,2

381,The metamorphic form of orthoclase is?,schist,gneiss,china clay,talc,3

382,The augite belongs to ?,Amphibole,Pegmatite,Pyroxene,none,3

383,Olivine belongs to?,Amphibole,Pegmatite,Pyroxene,Peridote,4

384,The metamorphic form of sandstone is?,Quartzite,slate,marble,talc,1

385,The metamorphic form of shale is?,Quartzite,slate,marble,talc,2

386,The metamorphic form of limestone is?,Quartzite,slate,marble,talc,3

387,The metamorphic form of granite is?,Quartzite,slate,talc,Geiss,4

388,The metamorphic form of basalt is?,amphibole,schist,marble,talc,1

389,The metamorphic form of dolamite is?,Quartzite,slate,marble,talc,4

390,The metamorphic form of slate is?,Quartzite,schist,marble,talc,2

391,Rank of the coal is?,wood;peat;lignite;bituminous coal;anthracite,anthracite;lignite;bituminous;wood;peat,wood;peat;lignite;anthracite;bituninous,none,1

392,The sp.gravity of the anthracite coal is?,1.2,1.5,2,2.5,2

393,The sp.gravity of the lignite coal is?,1.2,1.5,2,2.5,1

394,The calorific value of the lignite....kcal/kg?,2000,2400,3000,3500,2

395,If the coal size is 25mm to 50 mm then it is called?,Steam coal,Rubble coal,Slack coal,none,2

396,The core of earth consist of?,Manganese,Nickel and iron,Megnesium,Sulpher,2

397,The process of decay disintegration and decomposition of rocks under the influence of certain physical and chemical agencies of the atmoshere is?,Weathering,Erosion,Denudation,Sedimentation,1

398,The folds which are characterised with a downward warping of strata and the curvature becomes upwards is?,Anticlines,Symmetric fold,Overturned fold,Synclines,4

399,Garnet crystalline system is?,Isometric,Orthorhombic,hexagonal,tetragonal,1

400,Proximate analysis of coal gives?,% of elements present,% of ash;voltile matter etc,Thermal value of coal,none,2

401,Protodyaknov strength number of gabro is?,5 -10,10 - 15,0 - 5,20 - 25,4

402,Bord and pillar method mining of working coal seams is applicable in?,Geologically disturbed coal seams,Gassy seams,Seams at depth,Seams exposed to surface,1

403,Searching for ore is called?,Mining,Exploration,Prospecting,Exploitation,2

404,The cut holes are called?,easers,trimmers,sumpers,none,3

405,A system of mining applicable to inclined and undulating seams and also inclined seams is called?,Opencast mining,Horizon mining,Hydraulic mining,Bord and piller mining,3

406,Corner props are to be erected to the chock when the floor is steeper than ?,1 in 3,1 in 5,1 in 7,1 in 10,2

407,Minerals are formed due to ?,Mixing of elements,Heating of liquids,sedimentary process,Crystalisation,4

408,In order to avoid formation of the 'toe' in hard rocks the depth of shot hole should be?,0.5 times the height of the depth,0.5 to 1 m deeper below the level of the bench,same at the level of bench,2 m below the level the bench,2

409,The fill factor for the dragline is ?,85 %,80 %,65 %,75 %,3

410,The ratio at which the cost of opencast mining equals that of underground mining is called?,Breakeven stripping ratio,Limiting stripping ratio,Quarrible limit,stripping ratio,1

411,The stress due to weight of the strata is called?,Induced stress,Residual stress,Lateral stress,Burden stress,4

412,The abutment load reaches its maximum value about.....m?,5,10,15,20,3

413,The span detressed zone irrespective of depth is.....m?,10,20,30,40,3

414,The front abutment exerts a peak pressure .....m in advance of the L/W face?,0 to 1,1 to 3,3 to 5,5 to 7,2

415,The main fall on the L/W faces has generally occured after the face advance of .....m?,30,45,60,25,2

416,The relative distance between roof and floor in a vertical plane is called.....?,Convergence,Bed separation,Strain,Subsidence,1

417,The prop builds up(hydraulic prop) its full bearing load with an yield of less than.....cm?,1.5,2,2.54,3.5,3

418,Chock shields can work in steeply inclined seams upto maximum.....deg?,45,60,70,85,3

419,The roof is easily cavable if the protodyaknov index is.....?,4-6,6-7,7-8,8-9,1

420,Rhino exploder can blast maximum.....shots?,10,25,35,50,2

1,The oxygen percentage in intake air is?,20.28 %,78.04 %,20.93 %,25 %,3

2,The oxygen percentage in return air is?,20.28 %,78.04 %,20.93 %,25 %,1

3,Decay of timber by fungus growth is caused by?,CH4,O2 absorption,N2 depletion,CO2,2

4,Each 1 % reduction in the O2 % results in about the depletion from the light is?,10 %,20 %,30 %,40 %,3

5,The light of oil lamps is extiguished when O2 % is falls to?,19 %,17.5 %,21 %,20 %,2

6,Mining laws in India require that mine air should contain minimum % of O2 is?,25 %,21 %,19 %,17 %,3

7,CO2 is mostly found at?,roof ,middle of the roadway,dip areas of depillaring areas,anywhere in the mine,3

8,The permissible limit of CO2 is?,0.5 %,1.25 %,0.75 %,1 %,1

9,Flame safety lamp is extinguished at CO2 %?,1 - 2,2 - 3,3 - 4,4 - 5,3

10,Black damp is mixture of?,CO2+N2,CO2+H2,CO2+02,CO2+CO,1

11,Black damp is also called as?,stink damp or stythe,Marsh gas,choke damp,white damp,3

12,For every 5% of black damp the light is diminished by ?,20 %,30 %,40 %,50 %,2

13,The light is extinguished when black damp % is?,17 %,17.5 %,21 %,20 %,1

14,Co is aslo called as?,Black damp,Marsh gas,Stink damp,White damp,4

15,CO forms an explosive mixture with air when present within the range of nearly(by vol)?,5 - 15,4.5 - 45,12 - 75,4.5 - 75,3

16,Incomplete oxidation of coal result?,CO2,CO,CH4,None,2

17,The permissible limit of the CO is?,10 ppm,50 ppm,7 ppm,5 ppm,2

18,Hopcolite is used to detect ?,CO,CO2,CH4,SO2,1

19,Hopcolite is a mixture of?,Manganeese diaoxide + copper oxide,Potasium superoxide + copper oxide,silica gel +potasium pelladiam sulphate,Iodine pentaxide + sulphuric acid,1

20,Hoolamite is a mixture of?,Manganeese diaoxide + copper oxide,Potasium superoxide + copper oxide,silica gel +potasium pelladiam sulphate,Iodine pentaxide + sulphuric acid,4

21,The minimum ppm of CO detected by CO detectors is?,3,5,10,50,2

22,In M.S.A CO detector which tubes are used?,P.S detector tubes,Hopcolite,Hoolamite,None,1

23,Which is formed in stangnent water in old workings in the areas of gob?,CH4,SO2,H2S,CO2,3

24,H2S is aslo called as?,stink damp,Marsh gas,choke damp,white damp,1

25,when mixed with air H2S forms on explosive mixture the limits of inflamability is ?,5 - 15,4.3 - 45,12 - 75,4.5 - 75,2

26,Which can be found by blotting paper soaked in lead acetate changes its color to black?,SO2,H2,H2S,CH4,3

27,The permissible limit of the H2S is ?,10 ppm,50 ppm,7 ppm,5 ppm,3

28,The permissible limit of the SO2 is ?,10 ppm,50 ppm,7 ppm,5 ppm,1

29,When mixed with air H2 forms on explosive mixture the limits of explosibility is ?,5 - 15,4.3 - 45,12 - 75,4 - 75,4

30,The permissible limit for the nitrous fumes is?,10 ppm,50 ppm,7 ppm,5 ppm,4

31,Methane gas is also called as?,stink damp,Marsh gas,choke damp,white damp,2

32,Methane can be found at?,roof,floor,Any place in the roadway,Exhaust gases of the locomotive,1

33,M.S.A methanometer is worked on the principle of?,Formation of gas cap,Wheatstone bridge,Infraradiation,Optical properties,2

34,Spiralaram is worked on the principle of?,Formation of gas cap,Wheatstone bridge,Infraradiation,Optical properties,1

35,Ring rose detector works on the principle of?,Formation of gas cap,Wheatstone bridge,Diffusion-combustion-contraction,Optical properties,3

36,Interferometers works on the principle of?,Formation of gas cap,Wheatstone bridge,Infraradiation,Optical properties,4

37,One kg of methane in burning evolves .....kcal of heat?,10000,12000,13600,15000,3

38,The minimum voltage at which the methanometer works with accuracy is?,1 v,1.5 v,2.2 v,3 v,3

39,The wetbulb temparature in development faces should not exceed?,30 deg c,33.5 deg c,35 deg c,38 deg c,2

40,The minimum quantity of air per person in deg III mine is?,6 cu.m/min,8 cu.m/min,10 cu.m/min,12 cu.m/min,2

41,If the wet bulb temparature exceeds 30.5 deg c at any place air current should be faster than ?,1 m/s,2 m/s,3 m/s,0.5 m/s,1

42,whirling hygrometer is rotated with a speed of?,100 rpm,200 rpm,300 rpm,400 rpm,2

43,The value of the kata factor is ?,250,300,380,480,4

44,The unit for the kata factor is ?,millicolories/sq.cm/sec,kcal/sec/sq.cm,millicolories/sq.cm,millicolories/sec/sq.cm,3

45,The difference between the atmosphere pressure and the total pressure on the fan drift is called?,Velocity pressure of surface fan,Static pressure,Total pressure of surface fan,none,3

46,Static pressure is measured by?,Barometer,Pitot tube,Venturi meter,U-tube,4

47,Velocity pressure is measured by?,Barometer,Inclined manometer,U-tube,Pitot tube,4

48,Cooling power is a combination of temparature of air ;relative humidity and ...?,Moisture content of air,density of air,velocity of air,Pressure,3

49,For light manual workers the wet kata is?,18,25,30,8,2

50,Ordinary U-tube manometers are not useful for measurment of gas velocities?,below 12 m/s,13 to 20 m/s,20 to 30 m/s,above 30 m/s,1

51,Geothermic gradient in indian coal seam is....?,1 deg c per 15 m,1 deg c per 38m,1 deg c per 50 m,none, 2

52,Upto what depth from the surface the temparature is constant?,10m,15m,20m,25m,2

53,The speed of the centrifugal fan is?,1 to 100 rpm,100 to 300 rpm,300 to 1000 rpm,above 1000 rpm,2

54,The mostly used blade type in centrafugal fan is?,backward,radial,forward,none,1

55,The presence of Nitrous fumes are detected by?,The rotten eggs smell,sweet smell,metallic taste on tongue,head ache,4

56,The noxious and infalmmable gasses of old workings of a coal mine expands when there is?,sudden rise of temparature,sudden heavy roof fall,sudden rise in barometric pressure,sudden drop in barometric pressure,4

57,The instrument that is used to measure the relative humidity is?,pitot tube,aneroid barometer,hygrometer,anemometer,3

58,For comfortable working conditions the reasonable velocity of air at the working face is?,0.5 to 2 m/s,3 to 4 m/s,5 m/s,6 m/s,1

59,cooling power by conduction convection and radiation is given by using the ?,dry bulb temparature,wet bulb temparatute,Average time of wet and dry bulbs,wet and dry bulb time and velocity of air,2

60,Inclined water guage is used for the measurment of water guage for?,smaller than 200 mm,greater than 200 mm,smaller than 50 mm,greater than 50 mm,3

61,The inclined water guage can read upto?,2 mm,1.5 mm,1 mm,0.2 mm,4

62,The velocity of air flowing in a drift where the velocity pressure is 36 mm is?,36 m/s,24 m/s,42 m/s,48 m/s,2

63,In the centrifugal fan smooth flow air and conversion of velocity energy into pressure energy takes place?,In spiral casing,In the blades,At the tip of the blades,In the evasee,4

64,In the centrifugal fan reentry of of the discharged air is prevented by?,spiral casing,blades,evasee,eye,1

65,With a centrifugal fan for a given quantity of air increase of efficiency of the and reduction in cost of power can be obtained with?,well designed blades of the fan,well designed spiral casing,well designed evasee,well designed eye of the impeller,3

66,The maximum permissable speed of the axial flow fan is?,8000 m/min,6000 m/min,5200 m/min,4200 m/min,4

67,The maximum water guage developed in axial flow fan is?,10 cm,12.5 cm,13.5 cm,15 cm,2

68,The water guage developed and quantity circulated with an axial flow fan depend on ?,Size of the fan,Shape of the blades,Design of the evasee,Speed of the blade tips,4

69,with a axial fan direction of travel of air current to the mine is changed by?,changing direction flow of air into fan by means of doors,changing the blades on the rotor,changing the direction of rotation of the motor,not possible with this type of fan,3

70,The pitch of the blades of axial flow fans is?,1 to 5 deg,5 to 10 deg,10 to 15 deg,15 to 20 deg,3

71,By varying the pitch of the blades the pressure generated by axial flow fan is?,remains same,decreases,increases,increases 8 times,1

72,The water guage of a axial flow fan can be increased by?,increasing speed of rotation,changing the pitch of blades,installing 2 or more stages,enlarging the evasee of the fan,3

73,The manometric efficiency of axial flow fan is?,10 to 20 %,70 to 85 %,20 to 30 %,40 to 50 %,3

74,The ovarall efficiency of axial flow fan is?,10 to 20 %,70 to 85 %,20 to 30 %,40 to 50 %,2

75,Modern flame safety lamps can withstand an air velocity of?,5 m/s,10 m/s,15 m/s,20 m/s,3

76,The maximum air velocity at the face is?,1.7 m/s,3 m/s,5 m/s,7.5 m/s,1

77,The maximum air velocity at the main haulage roads is?,1.7 m/s,3 m/s,5 m/s,7.5 m/s,3

78,Air velocities in diesel locomotive sheds sholud not be less than?,4 m/s,2 m/s,1 m/s ,0.75 m/s,4

79,If the quantity of air passing through airway has to be increased from 1200 cu.m/min to 2400 cu.m/min the effect of HP of fan is?,8 times,4 times,2 times,1/2 times,1

80,If the velocity of the air is doubled then the water guage increased will be?,2 times,4 times,8 times,1/2 times,2

81,The area of the regulator required for flow of a certain quantity of air can be calculated from the formula is?,PQ / 75,K*S*Q2/A3,0.385Q/sqrt(P),none,3

82,In a mine of high resistance the series arrangement of fans gives a considerable increase in the quantity of air flowing is?,10 %,20 %,30 %,40 %,3

83,In a mine of high resistance the parallel arrangement fans a considerable increase in the quantity of air flowing is?,10 %,20 %,30 %,negligible,4

84,In a mine of medium resistance both series and parellel arrangement of fans give the same result that the increase in the air quantity is?,20 %,30 %,40 %,50 %,1

85,In a mine of low resistance the parellel arrangement of the fans gives the increase in the air quantity by?,20 %,30 %,40 %,50 %,4

86,When the wet bulb temparature exceeds 33.5 deg then the rise in the body temparature is?,3 deg,2 deg,1 deg,0.5 deg,3

87,Man dies when the body temparature is rise maximum upto ?,38 deg,41 deg,43 deg,48 deg,3

88,For breaking up the methane layer formed in the roof the minimum layering number required is?,4,3,2,1,3

89,While testing with safety lamp for CH4 if the minimum length of the blue flame is 11.5 mm then the % of methane is?,1.5,2.0,2.5,3.0,4

90,The rise in the pressure due to auto compression is .....per 100 m?,1.1 kpa,2 kpa,2.9 kpa,3.5 kpa,1

91,The rise in the dry bulb temparature of air due to auto compression is.....per 100 m depth?,2 K,1.96 K,1.012 K,0.976 K,4

92,At 300 K the working efficiency of a worker is ?,100 %,80 %,60 %,50 %,1

93,The angle of the evasee is ?,4 deg,6 deg,8 deg,10 deg,2

94,The ratio between H.P of ventilation and H.P of Fan shaft is called ?,Mechanical efficiency,Manometric efficiency,Ovarall efficiency,Fan efficiency,4

95,The ratio between H.P of ventilation and H.P input to engine is called?,Mechanical efficiency,Manometric efficiency,Ovarall efficiency,Fan efficiency,1

96,The sensitivity of the vertical U-tube manometer is?,1 pa,5 pa,10 pa,15 pa,3

97,The sensitivity of Inclined guage manometer is?,0.2 pa,0.4 pa,1 pa,2 pa,2

98,Heat stroke is caused when the wet bulb temparature is?,294 K,300 K,312 K,320 K,3

99,The efficiency of the workman if the wet bulb temparature in the mine is 310 K?, 100,75,50,25,4

100,For hard workers the dry kata is?,8,18,10,30,3

101,The minimum thickness of the ventilation stoping is?,25 cm,30 cm,38 cm,45 cm,3

102,The ventilation system which takes intake ventilating air to the lowest point of the district or face and allow it to travel to higher levels to ventilate the district before it goes to the return?,Ascential ventilation,Descential ventilation,Homotropal,Antitropal,1

103,Natural ventilation pressure assists the fan ventilation pressure in case of?,Ascential ventilation,Descential ventilation,Homotropal,Antitropal,1

104,When the air and mineral flow in the same direction the ventilation is called?,Ascential ventilation,Descential ventilation,Homotropal,Antitropal,3

105,The effect of splitting the air in parallel is ?,Overall resistance of mine increases,Overall resistance of mine decreases,Pressure produced by fan increases,pressure produced by fan decreases,2

106,The ventilating door should open against the intake air so that?,Air leakage takes from intake to return,The air pressure normally keeps the door closed,Recirculation of foul air avoided,Regulations are compiled with,2

107,Splits reduce the doors on haulage roads but ?,Increase pressure,Decrease quantity,Increase Number of air crossings,none,3

108,The quantity of air to be circulated by an auxiliary fan depends upon?,Length of the heading,Number of persons in the drift,Size of the drift,Rate of emission in the roadway,4

109,The quantity of air drawn by an auxiliary fan from the air way should not exceed?,equal to quantity,1/3 of quantity,3/4 of quantity,1/1.5 of quantity,2

110,The minimum distance between the fan and the corner of the drift to be ventilated should be?,3 m,4 m,5 m,6 m,3

111,The quantity of the air per minute should be..... per sq.m of working area?,2.5 cu.m,6 cu.m,7 cu.m,8 cu.m,3

112,On reversal of air current by axial flow fan the quantity of air reduces to..?,20 %,30 %,40 %,60 %,3

113,If the booster is placed inbye of the neutral line?,Leakage is maximum,Zone of recirculation takes place,Fan will damage,none,2

114,Compressed air jets increased the air flow by ?,10 %,20 %,30 %,40 %,2

115,Venturi tubes increased the air flow by?,10 %,20 %,30 %,40 %,3

116,The increase in the quantity of air due to expansion in the upcast shaft can be roughly taken as?,1 % for every 15 m,1 % for every 50 m,1 % for every 100 m,5 % for every 100 m,3

117,Anemometers are used to measrure air velocities between?,60 - 1000 m/min,0 - 10 m/min,10 -50 m/min,50 - 60 m/min,1

118,The vanes of the anemometes are ....deg to the direction of airflow?,10-20,20-30,30-40,40-50,4

119,For obtaining good results measurment of quantity flowing through an airway on either side of velocity measuring point the roadway should be uniform in cross section for a length of?,2 m,5 m,10 m,15 m,4

120,The minimum reading with a velometer can be taken as ?,0.5 m/sec,0.05 m/sec,0.1 m/sec,0.01 m/sec,2

121,For measuring air velocities less than 1 m/sec.....is used?,Anemometer,Velometer,Smoke generator,Pitot static tube,3

122,In smoke generator for measuring air velocity the time taken by the smoke to travel....m is recorded?,4 - 6 m,6 - 8 m,8 - 10 m,10 - 12 m,3

123,In anemometer the angle of yaw should be ?,less than 30 deg,less than 20 deg,less than 15 deg,less than 10 deg,4

124,The accuracy obtained in precise traversing is?,more than 5 %,5 %,3 %, 2 %,4

125,Air lock doors are required to be arranged where pressure on the door is?,more than 250 pa,less than 250 pa,more than 500 pa,less than 500 pa,1

126,In refrigerant circulation system the refrigerant used is?,Ammonia,Calcium chloride,Freon-12,Corbon dioxide,1

127,Good and harmless refrigerent in the following refregerents is?,Corbon dioxide,Methyl chloride,Freon -12,Ammonia gas,3

128,Profilometer is used for measuring?,Air velocity,cross section of irregular shape,Pressure of the air,% of CH4,2

129,Ammonia should not be used in U/g mines as it forms an explosive mixture with air if present ..... by volume?,30 %,40 %,50 %,20 %,1

130,The best extinguisher for fires involved live electrical equipment is?,CO2 type,Foam type,Water -CO2 type,Soda acid type,1

131,The best extinguisher for fires due to oil is?,CO2 type,Foam type,Water - CO2 type,Soda acid type,2

132,The best extinguisher for gasseous fires is?,Drypowder,CO2 type,Foam type,Water - CO2 type,1

133,If a quarry is abandoned the coal and the OB dump should be seperated by digging a trench ....m wide?,1 - 2 m,3 - 5 m,6 - 10 m,11 - 15 m,3

134,The coal stock should not exceed atleast?,200 te,100 te, 50 te,400 te,1

135,The height of the coal stock should not exceed atleast?,1 to 1.5 m,1.5 to 3 m,3 to 4 m,4 to 5 m,2

136,The ignition temparature of the bituminous coal is?,500 deg,450 deg,398 deg,200 deg,4

137,The coals are more prone to spantaneous heating if the coal having atleast?,25 % V.M,15 % V.M,40 % V.M,50 % V.M,1

138,The coal is not liable to spantaneous heating if the coal has oxygen content?,less than 2 %,4 %,8 %, more than 9 %,1

139,In CO2 extinguisher the pressure of the CO2 in liquid form is?,30 kg/sq.cm,50 kg/sq.cm,70 kg/sq.cm,100 kg/sq.cm,3

140,Halon is also called as?,CTC,BCF,TNT,Ammonia sulphate,2

141,Thermal conductivity of shale is ....of sandstone?,equal,1/4 ,1/2,1/3,4

142,The incubation period in SCCL mines is?,6 months,10 months,18 months,24 months,3

143,In spataneous heating the temparature of the initial stage is upto.....deg?,70 ,100 ,130,200,3

144,The coal is more prone to spantaneous heating if the moisture content is?,0-2 %,2 - 4 %,4 - 7 %,7 - 15 %,4

145,Spantaneous heating is more likely to occur in coals of?,vitrian,clarian,durain,fussin,1

146,Spantaneous heating is more likely to occur in coals of?,Peat,Lignite,Bituminous,Antracite,4

147,With CO/O2 deficiency ratio 2 % indicates?,Normal condition,existance of spantaneous heating,Heating in advance stage,Active fire,3

148,Do not allow the burning of fires within .....m from on incline opening?,10,15,20,25,2

149,Isolation stoping in deg I and II gassy coal mine should have minimum thickness of?,1 m,2 m,3 m,4 m,1

150,The isolation stoping should be explosion proof if the minimum CH4 % behind the stoping is ...?,1 %,2 %,3 %,4 %,2

151,The minimum thickness of the explosion proof isolation stoping is?,1 m,3 m,4.5 m,6 m,3

152,Isolation stoping should have minimum depth of locking in shale is?,1 m,75 cm,15 cm,30 cm,4

153,In Gypsum stopings for every cu.m of stoping volume about ...te of gypsum is required?,1.3 ,1.8,2.5 ,3 ,1

154,The sample pipe should pass through the temporary stoping and should extend ....m beyond it towards the fire side?,1 m,2 m,3 m ,4 m,3

155,Isolation stopings are ?,Preparatory stopings,Temporary stopings,Perminent stopings,none,1

156,Temporary stopings are constructed ?,Before depillaring is under taken,After heating or fire is detected,To seal off an area,none,2

157,Stopings should always be ket white washed on the surface and at the roof floor and sides for .....m outbye for every detection of cracks?,1 ,2 ,3 ,4 ,1

158,During the process of seaing fire area below ground the atmosphere near the stoing should be tested frequently for ?,Methane,CO,O2 deficiency,Both CO and O2,4

159,Air samples behind the stoping should be drawn during the periods of?,High barometric pressure,Low barometric pressure,Medium barometric pressure,none,2

160,Air samples from behind the stopings should be collected between?,6 am to 9 am,9 am to 12 noon,12 noon to 2 pm,10 pm to 12 pm,3

161,The blanketing layer which is used to detect cracks in stopings should be ....m thick?,1,2,3,4,3

162,Explosive limit of the CH4 is?,4.3 % to 45 %,4.3 % to 75 %,5 % to 15 %,4.3 % to 12 %,3

163,The maximum explosive violence is produced when the explosive mixture contains firedamp?,5 %,9 %,15 %,45 %,2

164,If the gas air mixture is compressed then the mixtures containing CH4 .....is inflammable?,1 %,2 % to 75 %,75 % to 90 %,above 90%,2

165,The atmosphere becomes non explosive irrespective of any % of firedamp if the minimum % of blackdamp is...?,35 %,25 %,20 %,50 %,1

166,The atmosphere is non explosive if the O2 percentage is?,below 12 %,12 % to 20 %,20 % to 40 %,40 % to 50 %,1

167,Ignition temparature of methane is?,250 - 350 deg c,350 - 650 deg c,650 - 750 deg c,750 - 1000 deg c,3

168,If the CH4 and air mixture is at 1000 deg C then the delay for ignition is?,20 sec,10 sec,5 sec,1 sec,4

169,The amount of heat is required to burn the methane is ?,15 kcal/mole,19.5 kcal/mole,22.1 kcal/mole,25 kcal/mole,3

170,The time interval that elapses between applicatic of a source of heat to firedamp air mixture and the actual moment of ignition of gas air mixture is?,Incubation period,Lag on ignition,Ignition time,Graham's ratio,2

171,The delay eliminates completely if the H2 % in methane is?,10,20,30,40,3

172,For coal dust explosion the quantity of coal is.....g/cu.m ?,10,20,30,40,3

173,Lower limit of inflammability of coal dust is?,1 gm/cc,10 gm/cc,5 gm/cc,2000 gm/cu.m,1

174,The higher limit of inflammability of coal dust is?,1 gm/cc,10 gm/cc,5 gm/cc,2000 gm/cu.m,4

175,The lowest temparature at which a fine dry coal dust cloud can be ignited is ?,250 - 350 deg C,350 - 450 deg C,450 - 650 deg C,700 - 800 deg C,4

176,The coal is not likely to propagate flame for coal dust explosion if the coal containing of V.M ?,Less than 13 %,Less than 25 %,More than 25 %,More than 40 %,1

177,For every 1 % firedamp the additional stonedust is required for efficient stone dusting is?,5 - 10 %,10 - 14 %,15 - 20 %,20 - 30 %,2

178,The size of the coal dust particles dangerous to cause greater inflammability is ?,1/5 - 1/10 mm,1/10 - 1/15 mm,1/2 - 1/5 mm,1/1.5 - 1/2 mm,2

179,The amount of stone dust which must be added to the coal dust to make it non explosive is ?,Index of explosibility,Index of inflammability,Index idnitabolity,Index of wettablity,1

180,Stone dust used for dusting should not coantain.....free silica ?,more than 5 %,less than 5 %,more than 30 %,5 to 30 %,1

181,The % of incombustable dust in the coal dust sample in a mine should be ..... for the stone to be effective inpreventing propagation of flame?,10 - 20 %,20 - 40 %,40 - 50 %,50 - 60 %,4

182,The quantity of moisture that would ensure non propagation of flame by coal dust atleat.....of the total mixture?,1/3,1/10,1/30,1/50,3

183,The maximum air velocity preventing escape of moisture from the coal dust at conveyor roads is?,8 m/s,6 m/s,4 m/s,2 m/s,3

184,The maximum air velocity preventing escape of moisture from the coal dust at working faces is?,8 m/s,6 m/s,4 m/s,2 m/s,3

185,The stone dust barrier will fail if it located within minimum..... m from the face?,30- 40,40 - 60,60 - 80 ,80 - 100,2

186,In light stone dust barriers the amount of stone dust is loaded is?,60 kg/m,40 kg/m,30 kg/m,20 kg/m,3

187,In heavy stone dust barriers the amount of stone dust is loaded is?,60 kg/m,40 kg/m,30 kg/m,20 kg/m,1

188,In bord and pillar method of mining the stonedust barriers are places .....m from the face?,50 - 100,100 - 150,150 - 400 ,400 - 500,3

189,In longwall method the light type of stone dust barriers should be placed within the range of ..... m from the nearest point of the face?,50 - 120,150 - 200,200 - 350, 350 - 400 ,1

190,In longwall method the heavy type of stone dust barriers should be placed within the range of ..... m from the nearest point of the face?,50 - 120,150 - 200,200 - 350, 350 - 400 ,3

191,The water barriers must contain atleast ...of water per sq.m of roadway cross section?,50 Liters,100 Liters,150 Liters,200 Liters,4

192,The distance between water barriers must no exceed ....m in gate roads and .....m in main roads?,100 ; 200,200 ; 400,300 ; 500,500 ; 600,2

193,The water barrier must be sited atleast .....m away from the stone dust barrier?,100,200,300,400,1

194,In triggered barrier ..... is used ?,Nitrogen,Ammonia,NaCl,Brine,1

195,Out of 21 % of oxygen in the atmosphere air that is inhaled by a person % of oxygen that is used from between inhalation and exhalation is?,1 - 2 %,2 - 3 %,3 -5 %,5 -7 %,3

196,The quantity of air inhaled per min at normal work is?,8 - 10,15 - 20,30 - 40,40 - 50,3

197,The O2 consumption per min if person is walking ?,0.3 - 0.4 lit,0.6 - 0.9 lit,1.3 - 1.8 lit,1.8 - 2.3 lit,2

198,The self contained oxygen breathing apparatus is of the type?,Open circuit,Portable,Regenarative,Dependable,3

199,The capacity of the protomark Self contained breathing apparatus is?,1 lit,2 lit,3 lit,4 lit,2

200,Protomark apparatus contains ....lit of oxygen with ....kg/sq.cm pressure?,100 ; 200,200 ; 400, 300 ; 400 ,300 ; 150,4

201,The reducing valve in protomark SCBA reduces the pressure of O2 supplied to wearer is ?,1 lit/min,1.5 lit/min,2 lit/min,4 lit/min,3

202,The weight of CO2 abosorbant in a prototype breathing apparatus is?,1 kg,2 kg,3 kg,4 kg,2

203,The CO2 abosorbant used in prototype breathing apparatus is?,Calcium hydroxide and SOdium hydroxide,Calcium corbonate and caustic soda,sodium hydroxide and caustic soda,calcium hydroxide and castic soda,4

204,The protosorb keeps the % CO2 in the breathing circuit?,Below 2 %,2 - 4%,5 %,6 %,1

205,The cooling agent in protosorb breathing apparatus is?,Calcium hydroxide,Sodium chloride,Sodium Phosphate,Methyle chloride,3

206,The cooling agent in the cooler is in crystal form at ordinary temperatures liquefies on usage of the apparatus by wearer at?,28 deg C,30 deg C,32 deg C,35 deg C,4

207,The duration of usage of protosorb SCBA is ?,1/2 hour,1 hour, 2 hour,3 hour,3

208,Duration of use of Drager SCBA is ?,1 hour,2 hours,3 hours,4 hours,4

209,Drager SCBA contains ....lit of O2 with a pressure .... kg/sq.cm?,100 ; 200,200 ; 400, 400 ; 200 ,300 ; 150,3

210,The oxygen feed rate in drager SCBA is ?,1 lit/min,1.5 lit/min,2 lit/min,3 lit/min,2

211,In drager SCBA the O2 feed to wearer's requirement over and above 1.5 lit/min is supplied by?,Bypass value,pressure guage valve,Lung govern valve,reducing valve,3

212,The duration of usage for chemical oxygen breathing apparatus is?,1/2 hour,1 hour, 2 hour,3 hour,1

213,The chemical used in chemical breathing appratus is?,Calcium hydroxide,Sodium phosphate,potasium super oxide,potasium hydroxide,3

214,The most important constiuent in gas mask is?,charcoal,siliga gel,caustic,hopcolite,4

215,The condition to use gasmask is atmosphere should contain sufficient O2 to support life and should contain more than ....% of CO?,1,2,3,4,2

216,In gas mask silica gel is used ?, To remove dust and smoke,To remove ammonia and water vapour,COnverts CO to CO2,To remove sulphuretted hydrogen,2

217,In gas mask caustic soda is used ?,To remove dust and smoke,To remove ammonia and water vapour,COnverts CO to CO2,To remove sulphuretted hydrogen,4

218,The duration of usage of gas mask is?,1/2 hour,1 to 2 hours,3 hours,4 hours,2

219,In gas mask the use of charcoal is ?,To remove dust and smoke,To remove ammonia and water vapour,COnverts CO to CO2,To remove organic vapours and acidic gases,4

220,The main function of self rescuer is?,To supply 2 lit/min oxygen to wearer,To convert Co to CO2,To supply 30 lit/min of oxygen to wearer,none,2

221,The drying agent in self rescuer is?,calcium chloride,charcoal with calcium bromide and lithium chloride,Silica gel,none,2

222,The smoke helmet or hose mask is used within a distance of?,10 m from FAB,25 m from FAB,50 m from FAB,100 m from FAB,3

223,The apparatus used to administer pure oxygen to an unconscious person or affected by noxious gasses is?,Smoke helmet,Reviving apparatus,Self rescuer,SCBA,2

224,In reviving apparatus the maximum O2 is supplied to person is?,10 lit/min,20 lit/min,30 lit/min,40 lit/min,3

225,A rescue brigade contains .....members?,10,7,5 -6 ,3-4,3

226,Pulmotor is a ?,SCBA,Escaping apparatus,Reviving apparatus,None,3

227,Samples from the sealed off area taken when the pressure behind is?,Negative,Positive,0,either positve or negative,1

228,The main guide for taking decision to reopen a sealed off area is?,Temperature graph,Time elapsed,Graph of analysis of air samples,O2 deficiency,3

229,The fire is extinct in the sealed off area if the oxygen percentage is?,12 %,8 %,6 %,2 %,4

230,The relative amount of luminous energy given by any source of light is?,illumination ,lux,intensity of light,lumen,3

231,Illumination is inversely proportional to ?,distance,square of distance,cube of distance,none,2

232,The unit of light emitted by a light source is?,Lumen,Lux,Candela,None,1

233,1 lumen/sq.m is?,Lumen,Lux,Candela,None,2

234,The unit of illumination in S.I units is?,Lumen,Lux,Candela,None,2

235,In u/g mines the purpose of white washing is?,To prevent coal dust explosion,To prevent spantaneous heating,To improve lighting,Both 2 and 3,4

236,The white washing is not done from the face upto ?,400 m,300,100 m,60 m,3

237,At 2m distance the illumination from lighe source of one candela is?,4 metre candels,2 metre candles,8 metre candles,0.25 candles,4

238,The minimum average lumens/sq.ft of light at pit bottom is?,1.5,1.25,0.4,0.9,1

239,The minimum average lumens/sq.ft of light at roadways is?,1.5,1.25,0.4,0.9,3

240,The minimum light required for reading and writing will be?,10 lumen/sq.m,10 lumen/sq.ft,1 lumen/sq.m,30 lumen/sq.m,1

241,The minimum light required in longwall working face is?,2 lux,5 lux,10 lux,12 lux,3

242,The flame safety lamp used for accumulation test is?,GL-5,GL-50,GL-60,None,1

243,An electric cap lamp with krypton bulb gives and amount of light?,15 lumens,20 lumens,30 lumens,50 lumens,3

244,For depillaring area of gassy coal mines of II and III degree the amount duct of light in addition to cap lamp of individuals required to be provided is?,a cluster of 10 to 12 caplamps,a cluster of 15-20 caplamps ,250 watt bulbs 4 or more,none,2

245,The mesh size in flamesafety lamp is?,30,20,10,5,2

246,The liquid used in GL-60 lamp is?,Petrol,Alcohol,Diesel,K-oil,4

247,The GL-60 flame safety lamp detects?,CO,CH4,CO2,Both 2 and 3,4

248,In the flame safety lamp should be discorded if the battery voltage is?,Below 5,Above 5,Below 2.3,2.3 to 5,3

249,The maximum battery voltage in flame safety lamp is?,2,3,4,5,2

250,The battery in flame safety lamp can relight the lamp ?,600 times,700 times,400 times,300 times,1

251,The wire guage in flame safety lamp should have a total heat radiation area of not less than?,400 sq.m,355 sq.m,250 sq.m,155 sq.m,4

252,The percentage test will be conducted if the methane percentage is?,1 to 2 %,2 to 3 %,3 % or more,Below 1 %,3

253,The minimum oxygen percentage required for supporting human life?,12 %,14 %,16 % ,19 %,2

254,An electric cap lamp of acid type gives?,1 V,2 V,4 V,6 V,3

255,In the charged condition the specific gravity of the acid is ?,1.26,1.18,1.81,1.62,1

256,The acid used in cap lamp is?,Sulphuric acid,Hydrocloric acid,Nitric acid,none,1

257,In the fully charged condition the active material in the positive plates is?,Lead,Antimony,Silicon,Lead peroxide,4

258,The gas produced in the electric cap lamp is?,Nitrogen,Oxygen,Hydrogen,Both 2 and 3,4

259,The life of the cap lamp in the pit is?,300 hours,400 hours,500 hours,600 hours,3

260,The illumination at the pitbottom is?,20 to 40 lumens/sq.m,15 to 20 lumens/sq.m,40 to 60 lumens/sq.m,none,1

261,In electric lighting the power cannot be used at a voltage exceeding ?,30,110,220,250,2

262,It is recommanded that the electric lamps should not be used within a distance of ....from the longwall face?,60 m,80 m,100 m,270 m,3

263,The advantage of flourescent lamp in underground is?,More output,Reduce glare,Shall not produce shadow,All of the above,4

264,The life of the lead acid battery is?,1 year,2 years,3 years,4 years,2

265,The disease caused due to insufficient light is?,Nystagmus,Ankylostomiasis,Silicosis,Asbestosis,1

266,The disease caused due to working in insanitory working conditions by a thread like blood sucking worm which enters the body through the skin is?,Nystagmus,Ankylostomiasis,Silicosis,Asbestosis,2

267,The place is said to be dusty if the dust concentration is?,1 mg/cu.m,5 mg/cu.m,10 mg/cu.m,20 mg/cu.m,3

268,The disease caused to inhalation of iron dust is?,Ankylostomiasis,Silicosis,Asbestosis,Siderosis,4

269,The particles of silica measuring ....microns in dia are most apt to produce damage?,0.5 to 2.5,2.5 to 3,3 to 4,4 to 6,1

270,The diseased caused due to inhalation of hydrated magnesium silicate ?,Ankylostomiasis,Silicosis,Asbestosis,Siderosis,3

271,The diseased caused due to exposed to dusty atmosphere containing large amount of smoke?,Anthracosis,Ankylostomiasis,Silicosis,Asbestosis,1

272,The permitted content of silica dust in mine air should not exceed ?,1 mg/cu.m,2 mg/cu.m,3 mg/cu.m,4 mg/cu.m,2

273,Konimeter dust sampler uses the principle of?,Thermal precipitation,Gravity,Impingment i.e inertia precipitation,Optical method,3

274,P.R.U pump dust sampler uses the principle of?,Thermal precipitation,Impaction,Impingment i.e inertia precipitation,Scattering of light,4

275,The level of tolerence of noice is?,20 to 50 dB,50 to 70 dB,70 to 85 dB,90 to 110 dB,3

276,Personal protective equipment is required if the noise level is?,80 dB,90 dB,125 dB,140 dB,3

277,A worker should not allowed to enter without appropriate ear protection an area in which the noise level is?,90 dB,115 dB,125 dB,140 dB,2

278,No working should be done within a distance of .....from the water logged area or abondoned mine or disused workings?,40 m,50 m,60 m,100 m,3

279,In working of water logged area the gallery should not be more than?,2.4m X 2.4m,3m X 3m,1.5m X 1.5m,4.8m X 3m,1

280,When approach within 60 m from the probable old working place the boreholes should driven atleast ?,5 m,10 m,15 m,20 m ,3

281,The interval of boreholes should not be more than .... while working near waterlogged workings?,3 m,5 m,7 m,10 m,2

282,The length of the bore hole should not be less than ....while working near waterlogged workings?,3 m,5 m,7 m,10 m,1

283,VOLSAFE boring apparatus can drill holes upto .....depth?,15 m,50 m,150 m,250 m,3

284,While approaching a water logged area with safety boring apparatus an emergency shutoff door shall be built away from the site of boring machine at a distance of?,10 m,15 m,20 m,25 m,2

285,The thickness and height of the temparory dam ?,0.5 m ; 1 m, 1 m ;1 m,1 m ; 3m,1 m ;2 m,1

286,The thickness of the permanant water dam is?,3 m,5 m,6 m,8 m,3

287,The electric cap lamp is?,Intrincically safe,Flame proof,Both 1 and 2,Neither 1 nor 2,4

288,The flame of a flame safety lamp while testing for CH4 spires of jumps at the ?,1 %,2 %,3 %,5 %,3

289,Automatic detectors give either audio or visual alarm when the % of inflammable gas exceeds?,0.5 %,0.75 %,1.25 %,2 %,3

290,Tuberculosis is caused due to ?,Insufficient light,Inhalation of iron oxide dust,Inhalation of quartz dust,none,3

291,The method of dealing with fire in mine where heating is in the initial stages and its exact location is known is?,Digging out and extinguishing,Blanketing,Flooding,Sealing off,1

292,Spraying the surface with liquid cement sand mixture (1:3) in dealing with fire is known as?,Plastering,Sealing,Guniting,spraying,3

293,A stone dust barrier may fail to arrest an explosion if there is a ....in roof of ther roadway over the barrier?,Layer of coal dust,timber support,Crack,Layer of methane,4

294,The holes drilled at different angles into sides while approaching water logged area is?,Advance bore holes,Prospecting holes,Flank holes,None,1

295,The ability to cause a flame to spread away form the source of ignition is called?,Index of explosibility,Index of inflammability,Index of ignitability,Graham's index,2

296,Where carbide lamps have to be used for safe working ther air velocity should not exceed?,2.5 m/sec,2.5 m/min,5 m/sec,5 m/min,1

297,In order to avoid permanent sulfating of the plates in lead acid battery the voltage of the lamp on usage must not be allowed to fall below?,1.8 V per cell,2.2 V per cell,4.4 V per cell,1.18 V per cell,1

298,The interval of time for igniting the fire damp air mixture at 650 deg C is ?,1 sec,5 sec,10 sec,30 sec,3

299,In self contained oxygen breathing apparatus the wearer can take more oxygen than he gets through the circuit by the ?,Main valve,Reducing valve,Relief valve,Byepass value,4

300,The shelf life of MSA methanometer is?,6 months,12 months,18 months,24 months,3

301,In metal mines a shaft is always sunk in?,Hanging wall ,the mineral deposit,Across the deposit,foot wall,4

302,The roadways driven from the shaft from different horizons for access to the mineral deposit are?,Winzes,raises,levels or drifts,companion levels,3

303,The interval between levels depending on several points vary from?,5 to 10m,10 to 15 m,15 to 100 m,100 to 120 m,3

304,Level interval is more in the case of?,Ore bodies thicker,Thin ore bodies,moderately thick ore bodies,Thick ore bodies,2

305,As the haulage road has to be straight and wide with smooth curves it is in the?,Foot wall,Hanging wall,Ore body,Across the ore body,1

306,The mineral is transported downwards in different sextions to the lower level and all the ore is carried to crusher at lowest level through?,Mine tubs,Belt,Orepasses,Hoists of small capacity,3

307,The most common method of raising adopted in majority of metal mines is?,Compartment revising,Long hole drilling,Drop raise,Open raising,4

308,The method of raising suitable for moderate lengths and inclination of 40 to 60 deg with horizontal with strong strata and wall rock is?,Open raising,Compartment raising,Longhole raising,Alamak raiser,1

309,Two or three compartment raising is limited to?,10 to 15m,15 to 20 m,20 to 25 m,25 to 30 m,2

310,Raising by longhole drilling is limited to?,10 to 15m,15 to 50m,50 to 100m,100 to 120m,2

311,Alamak raise climber can be used only where inclination of the raise from horizontal is?,10 deg,20 deg,30 deg,40 deg,4

312,In manual method of raise driving the monthly progress is nearly?,10 m,15 m,25 m,40 m,1

313,The open raising is limited to?,6 m,8 m,12 m,20 m,2

314,In vertical crater retreat method the spherical charges are used L:D should not exceed is?,1:4,4:1,6:1,1:6,3

315,Open stope method is used for ore of?,High grade,Low grade,Weak,Strong,2

316,The piller left to support the upper level is called?,Sill piller,Crown piller,Rib piller,Protective piller,2

317,The thickness of the bed in open stoping is?,2 to 3 m,4 to 6 m,7 to 10m,above 10m,1

318,The method of stoping best suited to low grade deposits of horizontal or mild dip and of thickness upto 5m is?,Open stoping,Breast stoping,Sublevel stoping,Shrinkage stoping,2

319,Breast stoping is employed for stoping ore bodies not more than?,1 m,8 m,12 m,15 m,3

320,Among the methods of open stoping method lends to large scale mechanisation in drilling ; blasing ;loading and transporing is?,Rill stoping,Breast stoping,Overhand stoping,Underhand stoping,2

321,The method of stoping suitable for thick ore body strong ore stable handing and foot wall steeply dipping ore is?,Open stoping,Shrinkage stoping,Cut and fill stoping,Sublevel stoping,4

322,The method of stoping suitable for thin ore bodies flat dip and both ore and walls are strong is?,Sublevel stoping,Top slicing,Longwall ,Room and piller mining,4

323,The maximum thickness of the ore body that can be worked with room and piller method is?,2m,6m,10m,12m,4

324,The method of stoping where the orebody is thick veins type ore and walls are strong and steeply dipping ore i.e footwall steeper than angle of repose of the broken ore is?,Open stoping,Shrinkage stoping,Cut and fill stoping,Sublevel stoping,2

325,The method of stoping suitable for steeply dipping reasonably firm ore mixed graded ore with irregular boundaries and where ground surface is to be protected from subsidence is?,Open stoping,Shrinkage stoping,Cut and fill stoping,Sublevel stoping,3

326,Recovery of ore by shrinkage stoping is?,40 to 50 %,50 to 60 %,60 to 75 %,75 to 90 %,4

327,To maintaing suitable working space for workings the muck pile is shrinked in the shrinkage stoping is?,20 %,30 %,40 %,50 %,3

328,The method of stoping for high grade ore with walls of the ore body and back of the stope are so weak which do not stand without support even for a week time is?,Sublevel stoping,Shrinkage stoping,Squareset stoping,cut and fill stoping,3

329,The method of stoping for narrow and steeply dipping ore with any type of ore and walls is?,Square set ,Top slicing,Resuing,Cut and fill,3

330,The method of stoping for massive ore bodies with walls and ore are weak and low grade ore is?,Sublevel stoping,Cut and fill stoping,Block caving,Shrinkage stoping,3

331,The method of stoping for massive ore bodies of high grade ore with walls and ore are weak and the ore is mined out in a series or horizontal slices from the top of the orebody?,Top slicing,Block caving,Squareset stoping,Sublevel stoping,1

332,The dilution in sublevel caving is?,10 to 35 %,35 to 45 %,45 to 60 %,above 60 %,1

333,The length of the back if the dip of the ore is 30 deg?,55 m,38 m,45 m,75 m,4

334,The method of stoping succesfully applied to all dips from horizontal to vertical is?,Rill stoping,Breast stoping,Overhand stoping,Underhand stoping,2

335,The limiting gradient of the slusher haulage is?,20 deg,30 deg,45 deg,60 deg,3

336,The method of stoping is applied for massive deposits of large horizontal extent is?,Top slicing,Cut and fill stoping,Block caving,Shrinkage stoping,3

337,The daily progress of raise by Alamak climber is?,10 m,25 m,30 m,40 m,2

338,Extraction of the ore minerals mechanically or hydraulically from floating vessals is known as?,Placer mining,Marine mining,Leaching,Dredging,4

339,The distance between levels on the plane of the orebody is called?,Length of back,Level interval,Horizontal interval,None,1

340,The process which involves reacting the ore with liquid solvent that will dissolve the mineral at low or moderate temparature and pressure is called?,Pyrometallurgical,Hydrometallurgical,Bio leaching,none,2

341,In drypowder extinguiser which chemical is used?,Soda bicorbonate,Mono ammonium phosphate,corbon tetra chloride,B.C.F,2

342,Overburden heaps should be atleast ....m away from the coal face of a quarry?,5 m,10 m ,15 m,20 m,3

1,The property which enables to be drawn into wires is called?,Ductility,Mallability,Toughness,Brittleness,1

2,The property when the material fails to yield and change its shape it subjected to a stress but breaks suddenly is called?,Ductility,Mallability,Toughness,Brittleness,4

3,The stored energy in the material is called?,Mallability,Resilence,Toughness,Brittleness,2

4,The resistance which a body offers to being pulled asunder by tensile force is called?,Ductility,Mallability,Toughness,Tenacity,4

5,The range of the poison's ratio is?,0 to 0.15,0.15 to 0.25,0.25 to 0.34,0.34 to 0.5,3

6,The maximum stress of metal can withstand without breaking or without failure for a specific number of stress reveals is?,Ductility,Tensile strength,Fatigue strength,Shear strength,3

7,The largest load repeatedly applied which a piece will carry without taking permanant set is called ?,Pay load,Proof load,Ultimate load,None,2

8,The alloy of copper and Zinc is ?,Brass,Cast iron,Bronze,Steel,1

9,The strength of the alloys of iron is depends on?,Sulphur content,Carbon content,Manganese content,None,2

10,The carbon content in the cast iron is?,3 to 4 %,0.15 %,1.8 to 5 %,5 to 6 %,3

11,The carbon content in the steel is?,3 to 4 %,0.15 %,1.8 to 5 %,less than 1.8 %,4

12,In steel as well as in wrought iron the percentage of sulphur should not exceed ?,0.06,0.1,0.5,0.8,1

13,In wrought iron the % of phosphourus should not exceed ?,0.06,0.2,0.5,1.0,2

14,The process of heating the metal to normalising temparature and then allowing it to cool slowly and uniformly not in air is called?,Forging,Normalising,Annealing,Hardening,3

15,The objective of annealing is?,To remove internal strains,To reduce the size of crystal grains,To improve the strength,None,1

16,Periodical heat treatment is not necessary if the chains are made of mild steel with a manganese percentage of?,0.06,0.5,1.0,1.5,4

17,The process of heating steel to a temparature slightly above critical temparature and allowing it to cool naturally in air is called?,Forging,Normalising,Annealing,Hardening,2

18,The object of normalising is?,To remove internal strains,To reduce the size of crystal grains,To improve the strength,None,2

19,The process of heating steel gradually uniformely to a temparature higher than the critical temparature and then cooled rapidly by quenching water is called?,Forging,Normalising,Annealing,Hardening,4

20,The elements in the GUNMETAL are?,Copper and zinc,Copper ; tin and zinc,Copper and tunston and nickel,None,2

21,The elements in the WHITE METAL are?,Tin ; Antimony ;Lead;Copper,Copper ; tin ; chromium,Copper ; zinc;Tin,Tungston and chromium,1

22,The percentage of silver content in the GERMAN SILVER is?,10 %,5 %,2.5 %,0 %,4

23,Rods are dipped in diluted H2SO4 or HCL to remove scales is called?,Patenting,Forging,Pickling,Normalising,3

24,The steel rod for wire making becomes homogeneous by the process of?,Patenting or normalising,Forging,Pickling,Annealing,1

25,In stainless steel the chromium percentage is?,10 to 15 %,18 to 20 %,25 to 30 %,less than 10%,2

26,The steel is unweldable if it contains carbon content?,Less than 0.5 %,0.5 to 1 %,1 to 1.2 %,More than 1.25 %,4

27,The ultimate strength of the wires for haulage or winding is....kgf/sq.mm?,160,100,200,400,1

28,The ropes required to carry the burden or load but more or less stationary is called?,Non-stranded,Stranded,Standing,Running,3

29,The ropes which undergoes frequent movement or coinling often with varying loads are called?,Non-stranded,Stranded,Standing,Running,4

30,Guy ropes;guide ropes are the example of?,Non-stranded ropes,Stranded ropes,Standing ropes,Running ropes,3

31,The ropes used for winding;haulage;coal cutting machine are the example of?,Non-stranded,Stranded,Standing,Running,4

32,The wires spiral round the core in the same direction as the threads of left hand screw are called?,Non-stranded,Stranded,Right hand ropes,Lefthand ropes,4

33,A number of concentrically twisted wire laid in the form of a helix round a central steel wire is known as?,Lang's lay,Ordinary lay,Strand,Locked coil,3

34,If the wires in the strand and the strands in the rope are laid in the opposite direction is called?,Lang's lay,Ordinary lay,Right hand,Locked coil,2

35,If the wires in the strand and the strands in the rope are laid in the same direction is called?,Lang's lay,Ordinary lay,Right hand,Locked coil,1

36,The wire ropes which offers better wearing surface and more resist to bending fatigue are called?,Lang's lay,Ordinary lay,Right hand,Locked coil,1

37,Internal stresses of the rope can be relieve with the use of?,Normalising the wire,Annealing the wire,Performed wire,Wassington pattern,3

38,Example of non stranded rope is?,Performed rope,Equal lay ropes,Regular lay,Locked coil ropes,4

39,The wire ropes required to be used in wet shafts are?,NOnrusting type,Galvanised,Bronze,Stainless steel,2

40,For winding purpose the locked coil ropes are preffered because?,offers greator resistance,had greater fill factor,permits high factor of safety,can't spliced,3

41,The type of rope most suitable for balancing rope in koepe winding is?,Regular lay,Locked coil,Flattened strand,Spiral strand,3

42,The ropes used for guide ropes are?,Locked coil,Regular lay,Lang's lay,Flattened strand,1

43,The ropes used for CCM are?,Locked coil,Regular lay,Lang's lay,Flattened strand,2

44,The ropes used for dragline are?,Locked coil,Regular lay,Lang's lay,Flattened strand,3

45,The ropes used for winding are?,Locked coil,Regular lay,Lang's lay,Flattened strand,3

46,The space factor for stranded rope is?,30 to 40 %,40 to 50 %,50 to 60 %,75 %,3

47,The space factor for locked coil rope is?,30 to 40 %,40 to 50 %,50 to 60 %,75 %,4

48,IN socketing the rope length under clips is nearly.....times the dia?,10,20,30,40,3

49,Most commonly used capel for rope haulage is?,Split capel,Coned socket,Interlocking wedge type,Bent back wire cone socket,2

50,In coned socket type cappel the metal poured is?,Gunmetal,Brass,Whitemetal,Babbit metal,3

51,In preparation of cone socket type cappel the white metal should not be heated more than?,100 deg c,200 deg c,365 deg c,450 deg c,3

52,In reliance capel the tapping of wedge is?,1 in 5,1 in 10,1 in 15,1 in 20,4

53,The jaws of the reliance capel are about ...times rope diameter in length?,30,24,12,15,2

54,The method of joining two wire ropes permanantly without using special fittings or attachments is called?,Splicing,Socketing,Performing,NOne,1

55,The length of splice for 13 mm dia rope is?,2 to 3m,4 to 5 m,6 to 9 m,10 to 15 m,3

56,The length of splice for 25 mm dia rope is?,2 to 3m,4 to 5 m,6 to 9 m,10 to 15 m,4

57,Example of equal lay ropes is?,Flattend strand,Performed,Warrington pattern,None,3

58,The capacity of the rope to resist the kinetic shock is roughly ?,Proportional to Dia of rope,Inversely Proportional to Dia of rope,Proportional to length,Inversely proportional to length,3

59,No rope should be allowed to remain in use after the wires have lost their diameter by?,10 %,20 %,30 %,40 %,2

60,The ratio between breaking load and total suspended rope is called?,Fill factor,Factor of safety,Capacity factor,Bending factor,3

61,The ratio between drum dia to the rope dia is called?,Fill factor,Factor of safety,Capacity factor,Beding factor,4

62,If the dia of a wire is 'D' then the dia of the simple round stranded rope is?,6D,8D,10D,12D,1

63,The height of the head gear is depend on the?,Skip and cage,Position of the drum,Fleet angle,Depth of the shaft,1

64,The distance between headgear pulley and detaching plate is?,2 M,3 M,4 M,6 M,2

65,A wind pressure on the exposed surface of the head gear frame may be taken as.....N/sq.m ?,100,750,1340,3000,3

66,The diameter of headgear pulley should be atleast.....times the dia of the rope?,60,100,120,150,2

67,Pulleys normally above ....m dia are made in to two halves?,2.5,3.5,4,6,1

68,The diameter of the headgear pulley should be ....of the rope diameter for stranded ropes and.....for locked coil ropes?,80 % ; 100 %,100 % ; 110 %,110 % ; 105 %,105 % ; 110 %,3

69,The angle of fleet should not exceed?,1 deg,1.5 deg,3 deg,5 deg,2

70,The pay load carried by skip is?,6 te,8 te,10 te,12 te,2

71,The ratio of pay load to gross load for skip winding is...and for cage winding is...?,0.6 ; 0.35,0.35 ; 0.6,0.8 ; 0.6,0.6 ; 0.8,1

72,The groove of the head gear pulley should be ....of the circumference of the rope is in contact with the groove?,1/4,1/2,1/3,3/4,3

73,The number of spokes in head gear pulley are?,15,19,21,25,3

74,The cage chains should be anneleaned atleast once in?,3 months,6 months,9 months,12 months,2

75,The components of cage arrachements chanins; links; shackeles; are exempted from periodical heat treatment if they are made of?,wrought iron,Mild steel,0.5 % carbon steel,1.5 % Manganese steel,4

76,The most important role plays in a safety that a component detaching hook is?,Jaws,Centre pivot,Copper pin,D link pin,3

77,All the suspension gear should be renewed after every ..?,5 years,7 years,10 years,15 years,3

78,The levels in safety catches spaced at intervals varying from?,0.1 to 0.3 m,0.3 to 1m,1 to 1.3 m,1.3 to 2 m,2

79,Retractable supports for cages used while loading and unloading being carried at the top of the shaft are?,Safety catches,bell plates,keps,platform,3

80,In case of koepe winding the decking difficulties while loading and unloading the cage are overcome by the use of?,Safety catches,bell plates,Keps,Hinged platform,4

81,The weight of the steel guides is...kgf/m?,5 to 10,10 to 20,20 to 55,60 to 90,3

82,The minimum space between two cages is generally?,20 cm,30 cm,40 cm,50 cm,3

83,The tensioning arrangement weights are about ....KN per 100 m depth of shallow mines and ...KN per 100 m depth for deep mines?,10 ; 5,5 ;10,10 ; 20,20 ; 10,1

84,The life of the guide ropes is?,10 years,20 years,5 years,3.5 years,1

85,The factor of safety for the drum winding is?,6,7,9,10,4

86,The factor of safety for the friction winding is?,6.5 to 8,9,10,12,1

87,While recapping atleast ...m long rope should be cut near the rope cappel?,1 m,2 m,3 m,4.5 m,2

88,The maximum life of the winding rope is?,10 years,7 years,5 years,3.5 years,4

89,The torques on the winding drum due to loaded cage and due to empty may be balanced as far as practicable by?,Use of balancing rope,Use of suitable shape of pulley,Changing the load on the two cages,COntrolling the speed,1

90,The method of nearly balancing the torques on the winding engine in deep shaft winding by the use of?,Balancing rope,Bi cyclo conical drum,Conical drum,Large cylindrical drum,2

91,The two factors i.e torque required to raise the load and the winding speed govern?,Power required for winding engine,Size of the motor for winding,Type of winder,Power rating of winding engine,4

92,The arc of contacting of winding rope in tower mounted friction winding is....deg ?,90 to 120,120 to 150,200 to 230,250 to 280,3

93,The arc of contacting of winding rope in friction winding is....deg ?,90 to 120,120 to 150,185 to 230,250 to 280,3

94,The coefficient of friction between the sheave lining and the rope is minimum of?,0.12,0.2,0.4,0.65,2

95,The rope may slip over the wheel when the ratio T1:T2 exceeds a value?,1.2 to 1.3,1.4 to 1.5,1.5 to 1.6,1.8 to 2,3

96,In very deep mining the method of winding best suited is?,Drum winding,Koepe winding,Tower mounted koepe winding,Blair winding,4

97,The method of speed control and electric winder of large capacity i.e above 800kw is?,sheostatic control,Liquid control,Ward leonard speed control,Electrical breaking,3

98,Automaric contrivances should be provided for every shaft exceeding minimum....m depth?,50,80,100,150,3

99,When men are being hoisted orlowered as the cage appoached pit top or pit bottom decking level its speed should not exceed 1.5 m/sec such arrangement is known as?,Over speed device,Overwind device,Wardleonard control,Slow banking device,4

100,Mechanical breaks are applied upto depth of?,100 m,200 m,300 m,400 m,2

101,Regenarative braking is used when?,Hoising loads,lowering loads,Inspection of the cage,None,2

102,In koepe winding the overwind is prevented by?,Detaching hook,Automatic contrivances,Convergence of the guides,None,3

103,In the event of power failure the brake automatically applied is?,Mechanical brake,Thrustor brake,Regenarative brake,None,2

104,The portion of the rope suffers from most severe shocks is?,Near the capel,Near the drum,The part of the rope that rests on the drum,Part of the rope rests on headgear pulley,1

105,The raising capacity of amine depends on the shaft capacity which in turn depends on?,Speed of winding,Pit top and pit bottom arrangement,Rolling stock,Despatch system,2

106,The pit top and pit bottom arrangement which deals with reasonable output per month and occupies less space is?,Run round arrangement,Back shunt circuit,Turn table circuit,Traverse circuit,3

107,The out put per month for the turn table circuit is?,50000,40000,30000,20000,3

108,The out put per month for the Backshunt circuit is?,50000,40000,30000,20000,1

109,The simplest system of haulage system for raising the loads?,Direct rope haulage,Endless rope haulage,Main tail rope haulage,Gravity,1

110,The gradient suitable for direct rope haulage is steeper than?,1 in 15,1 in 3,1 in 10,1 in 30,3

111,The general speed in rope haulage is?,2 to 3 Km/h,3 to 7 km/h,8 to 12 km/h,15 km/h,3

112,The limiting gradient for endless rope haulage is?,1 in 6,1 in 4,1 in 10,1 in 15,1

113,The rope speed in the endless rope haulage is?,2 to 3 Km/h,3 to 7 km/h,8 to 12 km/h,15 km/h,2

114,Where continuous movement of loaded and empty tubs are necessary the rope haulage suitable is?,Direct rope haulage,Endless rope haulage,Main tail rope haulage,Gravity,2

115,The surface of the drive pulley in endless haulage is?,Flat,Curved,Tapered,Grooved,3

116,In endless rope haulage the C.I sheets having the tapering of?,1 in 6,1 in 4,1 in 10,1 in 8,4

117,The correct place for tension bogey is?,near the haulage engine,any point on the level roadway,at the point where slack rope is most likely to occur,none,3

118,Smalman clip is the device used to attach?,Direct rope haulage,Endless rope haulage,Main tail rope haulage,Gravity,2

119,In over rope endless haulage system ..... is used for attaching the tubs?,Screw clip,Smallman clip,Cam clip,Lashing chain,4

120,The system of rope haulage most suitable for undulating roadways and where it is not possible or desirable to maintain two tracks is?,Main and tail ,Direct rope ,Endless rope,Gravity,1

121,In main and tail rope haulage the length of the tail rope is.....of the haulage plane?,Equal,1/2 times,2 times,4 times,3

122,The system of rope haulage suitable with least cost to lower the loads to feed to the haulage at lowest level is?,Direct rope haulage,Endless rope haulage,Main tail rope haulage,Gravity,4

123,The factor of safety for the rope haulage is?,10,9,6 to 7,5 to 6,3

124,The weight of the tracks for locomotives of more than 10 te capacity?,28 kgf/m,18 kgf/m,16 kgf/m,10 kgf/m,1

125,The distance between two adjacent sleepers should not exceed?,1 m,0.85 m,0.6 m,0.5 m,2

126,For tubs of 1.1 cu.m capacity the rail section should be of minimum weight of?,28 kgf/m,18 kgf/m,16 kgf/m,10 kgf/m,3

127,The general track guage for 1.1 cu.m tub?,0.3 m,0.6 m,0.9 m,1 m,2

128,The load on the tub axle; haulage speed; wet or dry condition of the mine will decide the selection of?,Type of haulage,width of the track,Weight and section of the rail,Type of ballasting,3

129,The track guage for locomotive is?,1 to 1.2 m,0.9 to 1 m,1.2 to 1.3 m,0.7 to 0.9 m,1

130,The purpose of the sleeper and ballast in the track is?,Distribute the intense bearing pressure of wheels on the rails over a sufficient area of floor,To strengthen the tracks,To prevent the tubs to felldown,None,1

131,The size of the ballast used in rail track is?,30 to 40 mm,40 to 50 mm,50 to 60 mm,60 to 80 mm,3

132,For the speed upto 13 kmph the radius of any curve in a mian haulage road should be?,Not more than 20 times longest rigid wheel base of any

vehicle in the train,Not less than 20 times longest rigid wheel base of any vehicle in the train,Not less than 30 m,Not less than 50m,2

133,For bending the rail to suitable curvature the device used is?,Retaining key,Jokey,Creeper,Jim crow,4

134,The safety device consist of steel rail or wooden block pivoted at the end which is used for arresting backward runaway for tubs is?,Back catch,Drop warwick,Back stay,Stop block,1

135,The safety device consist of wooden beam or block lying across the rails to prevent backward running of tubs is?, Back catch,Drop warwick,Back stay,Stop block,4

136,The safety device used behind an ascending set of tubs on direct or endless haulage to arrest runaway of tubs is?,Back catch,Drop warwick,Back stay,Runaway switch,3

137,The safety device used for arresting the forward runaway of tubs is?,Back catch,Drop warwick,Back stay,Runaway switch,2

138,The safety device is used effectivey in case of direct rope haulage in the event of runaway of set of tubs?,Back stay,Dropwarwick,Stop block,Stop block with runaway switch,4

139,The safety device used for slow down the loco in locomotives is?,Hydraulic tub retarder,Drop warwick,Back stay,Runaway switch,1

140,The limiting gradient for the locomotive is?,1 in 10,1 in 6,1 in 15,1 in 25,3

141,The loco is generally employed on the gradient of?,1 in 10,1 in 6,1 in 15,1 in 25,4

142,The design of locos are such that the total weight supported by each axle is?,Not more than 10 te,Not more than 15 te,Not more than 5 te,Not less than 5 te,3

143,The coefficient of adhesion is coeffcient of static friction between?,Wheels of loco and rails,axis and bearings,driving wheels and rails,None,1

144,The coefficient of adhesion is if the surface is dry and free of sand?,0.25,0.2,0.15,0.1,1

146,Theoritical maximum tractive effort of a loco is?,1/4 or 1/5 th of the total weight of loco,1/8 th of weight of loco,1/2 of the weight of loco,same as the weight of loco,1

147,The tractive effort varies with the?,directly weight of the train,inversely weight of the train,directly with the speed of the train,inversely with the speed of the train,4

148,The force required to cause movement is called?,Drawbar pull,Tractive effort,Running force,None,2

149,At starting the coefficient of friction is taken as?,0.01,0.0025,0.1,0.025,1

150,When running the coefficient of friction is taken as?,0.01,0.0025,0.25,0.025,2

151,The resistance to motion of loco itself when in motion is called?,COefficient of friction,Tractive effort,Drawbar pull,Rolling resistance,4

152,The steepest gradient in favour of load in loco is determined by?,Tractive effort required,Load on the train,Braking effort,Drawbar pull,3

153,The loco can barely stop itself and the wheels begin to skid when the gradient is?,1 in 15,1 in 25,1 in 12,1 in 14,3

154,The safe distance for brakes in loco is?,30 m,60 m,90 m,15 m,2

155,The optimaum gradient for the loco is?,1 in 15,1 in 25,1 in 100,1 in 300,4

156,In flame trap of diesel locomotives the plates have a width of ....mm and gap of ...mm between two adjacent plates?,50 ; 0.5 , 40 ;0.4,30 ;0.5 , 20 ;0.5,1

157,The diesel oil should have a flash point of not less than?,50 deg C,60 deg C,65 Deg c,75 deg C,3

158,The maximum percentage of CO in the exhaust gases before they enter the mine atmosphere is?,0.02 %,0.2 %,0.3 %,0.4 %,2

159,Diesel locomotives are not allowed where CH4 percentage exceeds....in general body of air?,0.75 %,1.25 %,0.5 %,1 %,2

160,To remove the oxides and aldehydes from the exhaust gases locomotives are fitted with?,Dust trap,Gas collectors,Exhaust conditioners,None,3

161,In Exhaust conditioner the gases are mixed with about...times thier volume of fresh ait before being exhausted into ventilating current?,20 to 30,30 to 40,40 to 50,70 to 80,2

162,In electrical locomotive the battery consist....of the toal weight?,30 %,40 %,50 %,60 %,4

163,The exhaust gases from the engine amounting in all to about....cu.m per B.H.P per minute?,0.5,0.65,0.85,0.085,4

164,If the track guage is more than 0.6 m then..... are preffered?,Rhombus pillars,Square pillars,Rectangle pillars,Circular,1

165,The haulage used upto 35 hp is called?,Rope haulage,Endless haulage,Tugger haulage,Gravity haulage,3

166,The limiting gradient for the tugger haulage is?,1 in 6,1 in 4,1 in 10,1 in 15,1

167,The size of direct rope haulage used underground generally ?,Less than 250 HP,Less than 200 HP,Less than 150 HP,More than 250 HP,3

168,The direct rope haulage with 150 HP the reasonal output is ?,1000 te/day,800 te/day,600 te/day,400 te/day,3

169,The maximum length of the rope haulage is?,1000 m,800 m,600 m,450 m,3

170,High capacity endless rope haulage may give ...?,1000 te/day,800 te/day,600 te/day,400 te/day,1

171,The maximum length of the endless rope haulage is?,1000 m,800 m,600 m,450 m,1

172,Limiting gradient for the main and tail rope haulage is?,1 in 6,1 in 8,1 in 10,1 in 3,4

173,Under favourable conditions diesel locomotives of 10 te may deal with output of?,2000 te/day,1500 te/day,1000 te/day,600 te/day,2

174,The minimum thickness of the seam for using trolley wire locomotive is?,1.5 m,1.8 m,2 m,3 m,2

175,To slow down the tubs the device used is?,Runaway switch,Back stay,Hydraulic tub retardar,Sprags,4

176,The maxmimum speed of winding drum shaft is?,100 rpm,60 rpm,45 rpm,30 rpm,3

177,When two tubs are in tandom the gap between the inner most ends shall not be less than?,10 cm,20 cm,20 mm,40 mm,2

178,The limiting gradient for the conveyor with rubber coating without breaking arrangement is?,1 in 3,1 in 4,1 in 5,1 n 6,3

179,The limiting gradient for the conveyor with rubber coating with thrustor breaking arrangement is?,1 in 3,1 in 4,1 in 5,1 n 6,1

180,The maximum angle of inclination for conveying coal on piled P.V.C belt is?,20 deg,18 deg,12 deg,16 deg,4

181,The prefferable speed of the belt conveyor is?,20 to 30 m/min,30 to 45 m/min,45 to 60 m/min,45 to 150 m/min,3

182,The maximum width of the belt conveyor is?,1 m,1.5 m,1.8 m,2 m,2

183,The coal carrying capacity of a tough belt of 650mm wide at a speed of 30 m/min is?,30 tph,50 tph,70 tph,105 tph,2

184,The coal carrying capacity of a tough belt of 1000mm wide at a speed of 30 m/min is?,120 tph,50 tph,70 tph,105 tph,4

185,Compared to trough belt the carrying capacity of the flat belt is?,30 %,40 %,50 %,60 %,3

186,The maximum lump size carried by a belt conveyor is limited to about.....of the belt width?,40 %,50 %,60 %,75 %,2

187,The inclination of the idlers is?,10 to 20 deg,20 to 30 deg,30 to 45 deg,45 to 60 deg,2

188,Belt conveyors are extended generally after ....m advance of the roadway?,90 m,150 m,40 m,60 m,1

189,Loop take up arrangements accomodate extension upto?,5 m,9 m,20 m,15 m,2

190,Snub pulleys are placed near the drive head?,to increase the arc of contact,to increase tension on the belt,to accomodate more belt for extension,for safety,1

191,Usually one motor drives a belt for a roadway of upto ?,100 m ,150 m,200 m,250 m,3

192,Where the series of belt conveyors are used for transpost of coal there shall be?,Remote control,Sequence control,Single point control,Multipoint control,2

193,The device used to hold the belt to run downward when the power is cutoff is?,Sequence control,Back stay,Remote control,HOldback,4

194,The inbye conveyor cannot be started unless the outbye recieving conveyor is attained ....of its normal speed?,40 to 50 %,50 to 60 %,60 to 70 %,70 to 80 %,3

195,The safety in belt conveyors to stop the belt conveyor from any position is?,Sequence control,Back stay,Remote control,HOldback,3

196,The speed of the singel chain conveyor is?,10 m/min,35 m/min,45 m/min,60 m/min,2

197,The limiting gradient for the scraper chain conveyor is?,1 in 3,1 in 4,1 in 5,1 n 6,1

198,The limiting length of the scraper chain conveyor is?,100 m,80 m,60 m,40 m,1

199,The capacity of the scraper chain conveyor is?,10 to 15 tph,15 to 20 tph,20 to 30 tph,30 to 40 tph,4

200,Armoured chain conveyors are principally used for?,bord and piller,In gate roads,Prop free front of L/W face,On surface,3

201,The vertical flexibility of Armoured chain conveyor is?,3 to 4 deg,2 to 3 deg,1 to 2 deg,4 to 5 deg,1

202,The horizontal flexibility of Armoured chain conveyor is?,3 to 4 deg,2 to 3 deg,1 to 2 deg,4 to 5 deg,2

203,The capacity of the A.C.C is?,100 tph,200 tph,300 tph,50 tph,1

204,The limiting gradient of A.C.C with flights is?,1 in 3,1 in 1.5,1 in 2,1 in 4,2

205,The limiting gradient of A.C.C without flights is?,1 in 3,1 in 1.5,1 in 2,1 in 4,1

206,The capacity of the cable belt conveyor is?,100 tph,200 tph,300 tph,50 tph,3

207,The loading capacity of gate end loaders is?,1 to 1.5 tph,2 to 4 tph,5 to 7 tph,7 to 9 tph,1

208,The operating length of the shuttle car is?,100 m,150 m,180 m,250 m,3

209,The traveling speed of the shuttle car with load is?,3 to 5 kmph,5 to 6 kmph,7 to 8 kmph,8 to 10 kmph,2

210,The traveling speed of the shuttle car without load is?,3 to 5 kmph,5 to 6 kmph,7 to 8 kmph,8 to 10 kmph,3

211,The limiting gradient for the shuttle car is?,Less than 6 deg,less than 12 deg,Less than 20 deg,More than 20 deg,1

212,The capacity of the shuttle car is?,100 tph,200 tph,300 tph,150 tph,4

213,Usual length of the of the chain conveyor with one drive is?,60 m,90 m,200 m,360 m,2

214,Usual length of the of the chain conveyor with multi drive is?,60 m,90 m,200 m,360 m,4

215,The dia of the eye in centrifugal pump is....times the impeller dia?,3 ,2 ,1/2,1/3,4

216,Centrifugal pumps are suitable for low heads upto?,10 m,20 m,30 m,40 m,2

217,Centrifugal pumps are suitable for water quantities upto?,2 lac lit/min,3 lac lit/min,4 lac lit/min,5 lac lit/min,3

218,The head developed per stage in centrifugal pump is?,5 to 10 m,10 to 15 m,15 to 50 m,50 to 60 m,3

219,The total suction lift of a turbine pumps should not exceed?,2 m,5 m,7 m,9 m,2

220,Turbine pumps are suitable for heads upto?,20 m,100 m,200 m,50 m,3

221,Turbine pumps are suitable for water quantities upt0?,1 lac lit/min,50000 lit/min,5000 lit/min,500 lit/min,3

222,The maximum number of impellers on the pump shaft normally does not exceed?,4,6,8,10,4

223,The valve which is used in the suction pipe to prevent water returning to the pump?,Foot valve,Retaining valve,BYpass valve,Sluice valve,1

224,The valve which is used in delievery column to hold the water if pump stops?,Foot valve,Retaining valve,BYpass valve,Sluice valve,2

225,The valve used for priming before start is?,Foot valve,Retaining valve,BYpass valve,Sluice valve,3

226,The main valve also called as?,Foot valve,Retaining valve,BYpass valve,Sluice valve,4

227,Theoritical suction lift of pump at mean sea level is?,5 m,10 m,20 m,30 m,2

228,End thrust acts?,towards suction end of the pump,towards delievery end of the pipe,On the impellers of the pipe,none,1

229,In balancing disc the loss of energy will be ?,1 to 2 %,2 to 4 %,4 to 6 %,6 to 8 %,1

230,Balancing disc to countaract the end trust is keyed to ?,Suction end of the shaft,Delievery end of the shaft,Middle of the delievery column,Middle of the suction column,2

231,The mechanical efficiency of the pumps may vary from?,30 to 40 %,40 to 50 %,50 to 60 %,70 to 80 %,4

232,The example of screw pump is?,Centrifugal pump,Turbine pump,Roto pump,Reciprocal pump,3

233,The self priming pump is?,Centrifugal pump,Reciprocating pump,Roto pump,Both 2 and 3,4

234,The pumps most suitable to be used at the working face is?,Roto/Mono pumps,Centrifugal,Drill pumps,Reciprocal,3

235,Suction head of Roto/Mono pump is?,4 m,5 m,8 m,10 m,3

236,Maximum head of the roto/mono pump is?,20 m,90 m,120 m,150 m,2

237,The pitch of the stator is....of the rotor in roto pump?,equal,twice,thrice,1/2,2

238,Head per stage in roto pump is?,30 m,40 m,50 m,60 m,4

239,The velocity of the water in the pipes of the pumps varies?,less than 1 m/s,1 to 2.5 m/sec,2.5 to 4 m/s,above 4 m/s,2

240,The diameter of the suction pipe is ....of delievery pipe?,equal,twice,thrice,half,4

241,In small quarries in the coal washaries and for irrigation purpose the pump usd is?,Roto/Mono pumps,Centrifugal ,Turbine,Reciprocal,2

242,Steel ropes can be used for winding upto maximum depth of?,100 m,200 m,300 m,400 m,2

243,In locomotive haulage system at the point of change in gradient the haulage track should be well graded over a length of?,12 m,20 m,24 m,30 m,3

244,The driving pulley used in endless rope haulage is?,Snub pulley,Jig pulley,Clifton pulley,None,3

245,The marging allowed...m allows a cage to be lifted for materials to be slung beneath it?,1 to 2 m,2 to 3 m,3 to 7 m,7 to 10 m,3

246,In turbine pump most of the kinetic energy of water is converted into pressure energy is?,Diffuser,Volute casing,In the eye of the pump,None,1

247,The device that is used to relieve the operator of the fatigue and keeps drill pressed towards exerting and upward lift and foward pressure feed pressure on the drill is?,Drifted,Stoped,Air leg,Rig,3

248,The machine suitable to be used in trimming the faces or in ripping the roof to save drilling and blasting time and cost is?,Jack hammer ,Air leg,Pneumatic hand pick,Drifter,3

249,In most premanant installations with pnematic tools and machines the leakage should not exceed ...of the total compressor capacity?,5 %,2 %,7 %,10 %,1

250,The speed of the jackhammer drill is controlled by?,Riffle bar,Rachet teeths,Throtle valve,Blower valve,3?

251,The jackhammer drill operated with compressed air at each stroke the drill bit is turned through.....of the one revolution?,1 / 4,1 / 2,1 / 8,1 / 12,4

252,The extent of rotation is dependent on the?,Twist in the riffle bar,Spacing of rachet teeth,Both 1 and 2,None of the above,3

253,The number of strokes per min in jack hammer is?,1500,2200,2800,3500,2

254,The air comsumption is ....cu.m per minute of free air in jack hammer?,1 to 2,2 to 3,3 to 3.5,4 to 4.5,3

255,The efficiency for electric genarator is .....but for air compressors it is...?,90 % ; 70 %,70 % ; 90 %, 80 % ;50 %, 80 % ; 80 %,1

256, The weight of the jack hammer is?,5 to 10 kgf,10 to 15 kgf,15 to 25 kgf,25 to 40 kgf,3

257,The drill used for upward drilling normally for wet drilling is?,Jack hammer,Drifter,Stoper,Electric drill,3

258,The weight of the coal drill with steel body?,30 kgf,21.5 kgf,17.5 kgf,15 kgf,2

259,The weight of the coal drill with aluminium body?,30 kgf,21.5 kgf,17.5 kgf,15 kgf,3

260,Output power of the electric coal drill is?,1 kw,2 kw,3 kw,4 kw,1

261,The operating voltage of the electric coal drill is?,30 v,110 v,225 v,660 v,2

262,The electric coal drill is rated?,2 hrs,1 hr,1/2 hr,1/4 hr,3

263,The rate of penetration of the drill bit with electric coal drill is?,1 m/min,2 m/min,3 m/min,1.5 m/min,4

264,The electric dill is capable of drilling ....holes each 1.5 m depth in 8 hours shift?,60,70,80,100,3

265,The speed of the drill rod in coal with electric coal drill is?,250 rpm,500 rpm,850 rpm,600 rpm,4

266,The speed of the drill rod in stone with electric coal drill is?,250 rpm,500 rpm,850 rpm,600 rpm,1

267,The cutting angle of the drill rod in electric coal drill is?,3 deg,30 deg,65 deg,45 deg,2

268,The rake angle of the drill rod in electric coal drill is?,3 deg,30 deg,65 deg,45 deg,1

269,A cowled fan mounted on the dirll and fins onthe cover are for the purpose of?,Strength,Provide cool air to driller,Bringing down the temparature of the drill,Protection,3

270,The power is supplied to the coal drill is the?,5 core armoured cable,3 core armoured cable,4 core screened cable,5 core screened cable,1

271,The speed of the motor of an electric rotary coal drill is reduced by?,Sun and planet gearing,Helical gear,Herringbone gearing,Bevel gearing,1

272,The shape of the drill rods used in coal drilling with electric drill ....?,Eccentric type,Vee type,Concentric type,None,1

273,Gathering arms are operated in gathering arm loader is?,Twin crank discs,Twin crank shafts,Twin motors,Connection through conveyor,1

274,The slewing angle in gathering arm loader is ...horizontally to axis either side?,20 deg,30 deg,45 deg,60 deg,3

275,Limiting gradient for the gathering arm loader is?,1 in 3,1 in 5,1 in 6,1 in 10,2

276,No of motors are in gathering arm loader is?,2,3,4,5,4

277,The limiting gradient for the rocker shovel is?,1 in 3,1 in 4,1 in 7,1 in 8,2

278,The limiting thickness of the seam for the continuous miner is?,3 m,4 m,5 m,2 m,1

279,The limiting gradient for the continuous miner used in underground is?,15 deg,20 deg,25 deg,30 deg,1

280,In continuous miner the cutting unit is driven by a water cooled motor of?,25 kw,75 kw,120 kw,200 kw,3

281,The cutting unit of continuous miner of borer type the gearing is?,Compound wheel type,Spur gearing,Bevel,Sun and planet,2

282,The output from the continuous miner is?,200 t/day,400 t/day,600 t/day,1000 t/day,3

283,The daily progress with the continuous miner is?,10 to 20 m,20 to 40 m,40 to 60 m,70 m,2

284,The daily progress with the Roadheader is?,8 m,10 m,15 m,20 m,1

285,The limiting gradient for the Roadheader is?,10 deg,15 deg,18 deg,25 deg,3

286,Maximum production rate with Roadheader is....cu.m per hour?,100,80,60,40,2

287,Permissable length of trailing cable is?,60 m,90 m,150 m,180 m,2

288,The maximum gradient for tyre mounted machine is ?,1 in 5,1 in 4,1 in 3,1 in 6,1

289,The maximum gradient for crawler mounted machine with spikes is ?,1 in 5,1 in 4,1 in 3,1 in 6,2

290,The maximum gradient for crawler mounted machine without spikes is ?,1 in 5,1 in 4,1 in 3,1 in 6,4

291,The maximum gradient for skid mounted machine is ?,1 in 5,1 in 4,1 in 3,1 in 6,3

292,The maximum gradient for skid mounted machine with special arrangement is ?,1 in 5,1 in 1,1 in 3,1 in 6,2

293,The maximum gradient for wheel mounted machine is ?,1 in 15,1 in 10,1 in 3,1 in 6,1

294,The limiting gradient for the SDL is?,18 deg,15 deg,10 deg,6 deg,1

295,The maximum height of the seam for the SDL is?,2 m,2.8 m,3.5 m,2.4 m,2

296,The output per day with the SDL is?,200 to 500 te,500 to 700 te,100 to 200 te,above 700 te,1

297,The limiting gradient for the LHD is?,1 in 3,1 in 5,1 in 7,1 in 9,3

298,The maximum output of the LHD with 3.5 cu.m per month is?,25000,35000,45000,15000,2

299,The maximum speed of the LHD when empty is?,3 to 5 kmph,5 to 8 kmph,8 to 10 kmph,10 to 12 kmph,3

300,The maximum speed of the LHD when loaded is?,3 to 5 kmph,5 to 8 kmph,8 to 10 kmph,10 to 12 kmph,1

301,The motor capacity of the shearer now a days?,500 kw,375 kw,1500 kw,1000 kw,2

302,The maximum thickness of the seam that the shearer can work now a days is?,3 m,4 m,5 m,7 m,3

303,The limiting gradient for the shearer is?,15 deg,25 deg,35 deg,40 deg,3

304,In permanent cable used to supply the electric power run through the shaft or incline the moisture of atmosphere is excluded by?,Impregnated paper insulation,Tarred jute,Seamless lead sheath,Double armouring,3

305,The permanant cable suspended in vertical shaft should be?,Weather proof,Non drain,Double armouring,Fire proof,2

306,The conductivity of the armouring of permanant cable serving the purpose of earthing shall have atleast...that power core?,10 %,20 %,30 %,50 %,4

307,While the face is advanced the cable supplies the power from gate end box to coal drill is extended through joint box of?,Straight through type,inset type,flit pin plug type,cone type,3

308,In gate end box the leakage protection should work where is a leakage os?,1 %,5 %,10 %,20 %,2

309,The most common type of flame proof protection is?,Hermitically sealed protection,Flange protection,Hinge protection,Open protection,2

310,Intrincically safe circuit or apparatus works on voltage not more than?,30 v,110 v,220 v,60 v,1

311,Gate end box used to supply electricity of?,110 v,225 v,550 v,1100 v,3

312,The supply of compressed air alternatively from top and bottom of piston in jackhammer is caused by the part?,Throtle valve,Stem,Chunk,Pawl and rachet,4

313,The maximum working gradient for coal cutting machine is?,1 in 3,1 in 4,1 in 6,1 in 10,3

314,The electric cable used for water places is?,Compound insulated,Volcanised bitumen insulated cable,5 core individually screened cable,5 core collectively screened,1

315,In which test is the steel wire subjected to streching force until it breaks?,Tension test,Torsion test,Bending test,Wrapping test,3

316,In reciprocating pump the fitting is used to ensure uniform flow of water is called?,Foot valve,Air vessal,Air lock,Bye pass valve,2

317,The height of the liquid column in meters produced certian pressure at the bottom of the pope is known as ?,Total static head,Discharge head,Head,Friction head,3

318,The breaking strength of the locked coil rope is..... if C is rope dia?,52 C*C,56 C*C,85 C*C,95 C*C,3

319,When the material subjected to repeated stresses cause?,Fatigue,Corrosion fatigue,Surface embrittlement,Kinking,1

320,The ultimate strength of the steel rods is about....kgf/sq.mm?,65,85,100,120,1

321,By the process of normalising ?,Tensile strength of rope increases,Tensile strength of steel rod increases,The steel rod is drawn into wires,The impurities in the steel rod are removed,2

322,Roll rack chainless haulage is used?,Road headers,Prop free front faces,Gate roads transportation,Shearers,4

323,The component in the winding engine house that stores the energy by speeding up during periods of light load and delievers it by slowing during the heavy load period is?,Electrical braker,Flywheel,Electrical gear,Additional winding in the system,2

324,Turbine pumps with multi stages are fitted with and differs with centrifugal pump is?,Pressure guage,Balancing disc,Retaining valve,Foot valve,2

325,In long length of haulage system the effective signalling system is by the use of?,High capacity battery,110 v line current,Step down potential transformer,Relays,4

326,ALpine miner is mounted on?,Tyres,Skid,Crawler mounted,Individually operated crawler track,4

327,The compressed air jack hammer will not operate properly on long or shorter strokes than that for which it is designed the important requirement is?,Length of the piston,Length of the shank,Length of the rifle bar,Length of the chunk,2

328,Total capacity of motor in AM-50 roadheader is?,100 kw,155 kw,200 kw,120 kw,2

329,The shape of the drill rod used in stone is?,Diamond section,HExagonal,Square section,Turbine section,4

330,In deep mines as a safety the capacity of the rope to resist kinetic shock is proportional to ?,Length of rope,Diameter of rope,Strength of rope,Square of length,1

331,A monocable aerial ropeway is generally preffered?,In flat terrain,For large tonnage,In hilly terrains,For small distances,3

332,Tub rerailers are placed at intervals?,100 m,200 m,250 m,300 m,3

333,The difference between the pump centre line to the free discharge level is called?,Head,Static discharge head,Static suction lift,Total static head,2

334,The fitting common for all the pumps but not required for submersible pumps is?,Suction pipe,Delievery pipe,Main valve,Retaining valve,1

335,The maximum gradient of areal rope in a span is?,1 in 3,1 in 5,1 in 7,1 in 1,1

336,The limiting gradient of areal rope way in mountain region for monocable is?,1 in 3,1 in 5.5,1 in 7,1 in 4,2

337,The limiting gradient of areal rope way in mountain region for bicable is?,1 in 3,1 in 5.5,1 in 7,1 in 4,4

338,The capacity of the areal rope way for monocable over long distance about 100 km is?,100 tph,200 tph,350 tph,400 tph,2

339,The capacity of the areal rope way for bicable over long distance about 100 km is?,100 tph,200 tph,350 tph,450 tph,4

340,The life of the areal rope is?,1 yr,2 yr,3 yr,4 yr,3

341,The rope used for track rope in areal rope way is,Locked coil,Lang's lay,Regualar lay,Flattened strand,1

342,The rope used for traction rope in areal rope way is,Locked coil,Lang's lay,Regualar lay,Flattened strand,2

343,When a train of tubs hauled up gradient a back stay is attached to.....of the train ?,Middle tub,First tub,Last tub,The sleeper of the track,3

344,Where Electric battery loco is used in under ground the battery charging station shall close to?,An intake airway,the entrance of the district,the shaft bottom,last working place,1

345,In designing a hoisting system the properties of rope that are most important are?,Weight per unit and type of rope,Weight per unit length and type of the core of rope,Strand diameter and weight to be hauled,Weight per unit length and breaking strength,4

346,The supply of voltage for electric LHD is?,110 v,220 v,440 v,1100 v,4

347,What is the normal operating air pressure for pnematically operated machines in underground is.....psi?,65,25,85 to 100,100 to 120,3

348,The appropriate function of inter cooled in large multi stage compressor is?,To call the LP air,To reduce power consumption,To drain moisture,All the above,4

349,Clifton pulley used in ?,Direct rope haulage,Endless rope haulage,Gravity haulage,Main and tail rope haulage,2

350,Friction head of a pump varies proportionally with the?,Square root of the length of the pipe range,Square of the length of the pipe range,Length of the pipe range,Thrice the pipe range,3

351,The capacity of the wooden prop?,6-8 te,10 - 15te,4 - 6 te,15 -20 te,1

352,The capacity of the iron prop?,10 -15 te,15 -25 te,25-30 te,40 -50 te,3

353,The capacity of the wooden cross bar is?,1 to 2 te,2 to 4 te,4 to 8 te,8 to 10 te,2

354,The capacity of the safary support is?,1.5 te,5 te,10 te,4 te,1

355,The capacity of the iron girdar is?,1.5 te,5 te,10 te,4 te,4

1,Periodical medical examination is carried out for every?,3 years,5 years,6 years,4 years,2

2,Every year ...of the persons employed at the mine undergo the medical examination every year?,1/2,1/3 rd,1/4 th,1/5 th,4

3,The remunaration for the members of the committee shall be fixed by?,Central Govt,State Govt,The mining company,None,1

4,If a member of the commiittee intends to be absent from India for a period longer than ...he shall tender his resignation?,3 months,1 yr,9 months,6 months,4

5,The secretary to the committee shall give atleast....notice to every member of the commitee present in India?,7 days,14 days,30 days,45 days,2

6,No business shall be transacted at a meeting of the committee unless atleast ...members including chairman are present?,4,6,8,3,1

7,The periodical medical examamination is not apply for?,permanently emplopyed,Tempararly employed,Casual basis for countinuous period not exceeding 6 months,both 2 and 3,4

8,The annual return shall be submitted to chief inspector by manager on or before.....of every year?,20 th feb,1 st jan,1 st may,20 th may,1

9,The workman inspector shall be employed if the number of persons employed exceed ?,500,1500,1000,100,1

10,If the number of persons are 3000 in the mine then the number of workmen inspectors are required is?,1,2,3,4,3

11,The term for the workmen inspector is?,5 yrs,3 yrs ,2 yrs,6 yrs,2

12,The owner; manager or agent shall take action on the report of workmen's inspector within a period of....from the date of entry into the register?,7 days,30 days,15 days,10 days,3

13,The owner;agent or manager shall constitute a 'safety committee' for promoting safety in the mine for more than .....persons are ordinarly employed in every mine?,500,1000,50,100,4

14,The number of members are nominated in the safety committee is?,5,10,13,15,3

15,The safety committee shall meet atleast once in?,15 days,7 days,6 months,30 days,4

16,The owner;agent or manager shall within a period of ...from the date of reciept of the recommandations of the safety committee shall indicate to the secretary to the safety committee;the action taken to implement the recommandations?,7 days,30 days,15 days,10 days,3

17,The quantity of drinking water to be provided in a mine or any part thereof shall be on a scale of atleast.....for every person employed at any one time?,1 lit,2 lit,3 lit,4 lit,2

18,The drinking water shall be cooled mechanically or other means if the persons employed in the mine above or below is more than .....?,50,100,150,250,2

19,The vessals where water is stored if the water is not supplied by taps;shall be cleaned once in?,every day,2 days,5 days,6 days,1

20,If the source of driking water is not from a public water supply system;an inspector may by order in in writing require the owner;agent or manager of the mine to submit a certificate from a competent health authority or analystas to fitness of the water for human consumption within...?,7 days,15 days,3 days,atleast possible delay,4

21,The scale of latrine accommodation shall be atleast one seat for every.....males or females employed in every mine?,25,50,100,150,2

22,If the number of males employed in the mine is 253 then the number of latrines required is?,4,5,6,7,3

23,If the number of persons employed in the mine is 500 then the quantity of water required is?,1000 lit,500 lit,250 lit,1500 lit,1

24,The latrine shall be cemented upto the height of?,0.75 m,1.25 m,1.5 m,0.5 m,2

25,Every latrine shall be white washed once atleast in every ...?,3 months,6 months,4 months,12 months,3

26,If any mine more than....persons employed in underground at any one time latriens shall be provided underground?,25,50,75,100,2

27,At every mine employing more than ...persons on any day of the preceding calendar year there shall be provided suitable first aid room?,50,100,150,250,3

28,The first aid room shall have a floor space of not less than ...?,10 sq.m,14 sq.m,20 sq.m,18 sq.m,1

29,The first aid room shall be in charge of a qualified medical practitionar where the number of persons ordinarly employed in a mine is more than?,500,1000,250,150,2

30,Every person who suffers an injury during the course of work shall report for examination or treatment at the first aid room hospital or dispensary;as the case may be .....irrespective of first having been rendered at or near the place of work?,Before leaving the mine,Before entering into the mine,after leaving the mine,None,1

31,The first aid station shall be provided at the top of every shaft;in every workshop;at every other places;at every opencast workings where more than ....persons are employed at any time?,50,25,100,150,1

32,The first aid stations shall be constructed such that the provision of a first aid station within ....of another first aid station?,100 m,200 m,300 m,400 m,3

33,A day of rest for any person shall mean a period(weekly day of rest) of atleast....?,2 days,24 consecutive hours,24 non consecutive hours,36 hours,2

34,No apprentice or trainee of the age of ....years shall be employed in a mine except under immediate supervision of a competent person?,20 to 23 years,18 to 20 years,16 to 18 years,above 23 years,3

35,Workman's inspector comes by?,Election,Deputation,Selection,Nomination,4

36,On or before the .....every year the owner;agent or manager of mine shall exhibit on the notice board at the office of a mine information regarding leave with wages?,20 th feb,1 st jan,1 st may,20 th may,1

37,At every mine where more than ...persons are ordinarly employed;there shall be provided adequete and suitable shelters at or near loading?,50,25,75,100,1

38,In opencast workings;workshops and mine entrances where ...persons are ordinarly employed for taking food and rest;shelters shall be provided?,50,25,75,100,2

39,The floor area of the shelter should not less than?,10 sq.m,14 sq.m,20 sq.m,18 sq.m,2

40,The height of the shelter should not less than?,1.25 m,1.5 m,2 m,2.5 m,4

41,At every mine where more than.....persons are ordinarly employed;a canteen should be maintained?,100,150,200,250,4

42,Every canteen shall be situated not less than ....from any latrine;urinal;boiler house;enigine room etc?,5 m,10 m,15 m,20 m,3

43,Inside the rooms and passeges of the canteens should be white washed atleast once in...?,6 months,3 months,1 yr,2 yr,3

44,Canteens should be painted atleast once in...?,6 months,3 yrs,1 yr,2 yrs,2

45,The member of elected members of the canteen managing comittee shall be on a scale of one for every ...persons employed?,1000,500,2000,1500,1

46,The members of the canteen managing comitte shall not be more than ...and shall not be less than...?,10 ; 5,6 ;4, 8 ;5,5 ;2,4

47,For every mine wherein .... or more persons are ordinarly employed the owner;agent or manager shall appoint a Welfare officer?,500,1000,150,200,1

48,If the number of persons employed in a mine is 5000 then the number of welfare officer appointed in the mine is?,2,3,4,5,2

49,A written notice of every appointment;authorisation;discharge;dismissal;resignation every welfare

officer and of the date thereof shall be sent by manager to the C.I within ....from the date of such appointment?,15 days,7 days,30 days,45 days,2

50,A medical practioner making an examination shall be paid a fee not exceeding rupees....for each clinical examination?,12,16,20,25,2

51,The diability allowance payable shall be at the rate of .....of the monthly wages?,25 %,40 %,50 %,60 %,3

52,Notice of commencement and end of work is maintained in the?,FORM A,FORM B,FORM C,FORM D,1

53,Register of employes;termination of employment;notice of work is maintained in the?,FORM A,FORM B,FORM C,FORM D,2

54,Register of persons employed in ocp is maintained in ?,FORM A,FORM B,FORM C,FORM D,4

55,Register of persons employed in underground is maintained in ?,FORM A,FORM B,FORM C,FORM D,3

56,Register of persons employed above ground other than ocp is maintained in?,FORM C,FORM D,FORM E,FORM F,3

57,Register of overtime wages is maintained in the form of?,FORM F,FORM G,FORM H,FORM I,4

58,Register of leave wages during year is maintained in the form of?,FORM F,FORM G,FORM H,FORM I,3

59,Register of compensatory days of rest is maintained in the form of?,FORM F,FORM G,FORM H,FORM I,1

60,Registe of leave account during the year is maintained in the form of?,FORM F,FORM G,FORM H,FORM I,2

61,Register of information regarding leave with wages is maintained in the form of?,FORM J,FORM K,FORM L,FORM M,3

62,Register of return of reportable accidents is maintained in the form of?,FORM J,FORM K,FORM L,FORM M,2

63,Register of return of reporatable accounts adn minor accidents is maintained in the form of?,FORM J,FORM K,FORM L,FORM M,1

64,Register of Notice of initial/periodical medical examination is maintained in the form of?,FORM J,FORM K,FORM L,FORM M,4

65,Register of second and final notice of initial periodical medical examination is maintained in the form of?,FORM N,FORM O,FORM P,FORM P-I,1

66,Register of medical standard of fitness of persons employed is maintained in the form of?,FORM N,FORM O,FORM P,FORM P-I,3

67,Register of medical standard of fitness for reasons to be employed is maintained in the form of?,FORM N,FORM O,FORM P,FORM P-I,4

68,Register of report of medical examination is maintained in the form of?,FORM N,FORM O,FORM P,FORM P-I,2

69,Register of annual return for the year is maintained in the form of?,FORM Q,FORM R,FORM S, FORM T,4

70,Register of report of medical re-examination is maintained in the form of?,FORM Q,FORM R,FORM S, FORM T,3

71,Register of second and final notice of medical by medical board is maintained in the form of?,FORM Q,FORM R,FORM S, FORM T,2

72,Register of notice of medical re-examination by medical board is maintained in the form of?,FORM Q,FORM R,FORM S, FORM T,1

73,Record maintained by workmen's inspector is maintained in the form of?,FORM G,FORM R,FORM T, FORM U,4

74,The information regarding equipment of first aid room is maintained in?,first schedule,second schedule,third schedule,forth schedule,2

75,Abstracts of the mines act is in?,second schedule,third schedule,forth schedule,fifth schedule,4

76,No adult shall work above ground ina mine for more than ....in any week?,36 hours,24 hours,48 hours,60 hours,3

77,The over time wages are ....of ordinary wage rate?,equal,twice ,thrice,half,2

78,No person shall be allowed to work in a mine who has already been working in any other mine within the preceding...?,6 hours,9hours,12 hours,18 hours,3

79,Maximum maternity leave allowed is?,4 weeks,6 weeks,9 weeks,12 weeks,4

80,Any person who has been allowed leave for not less than ...shall be paid wages due for the period of leave allowed before his leave begins?,3 days,4 days,6 days,9 days,2

81,The maximum working hours in a day is?,6 hours,8 hours,9 hours,12hours,3

82,The fine for obstructing insprector duties?,500 Rs,1000 Rs,200 Rs,2500 Rs,1

83,The fine for giving notice without best knowledge is?,500 Rs,1000 Rs,200 Rs,2500 Rs,2

84,The fine for running time without manager is?,500 Rs,1000 Rs,200 Rs,2500 Rs,4

85,The fine for contravences of any regulation or byelaws is?,500 Rs,1000 Rs,2000 Rs,2500 Rs,3

86,The quantity of driking water per person employed in a mine where W.B.T temparature exceeds 30 deg c is?,2 lit,3 lit,4 lit,5 lit,2

87,Child means a person who has not completed his?,16 th year,17 th year,18th year,15 th year,1

88,According to mines rules the interior walls of a latrine shall be white washed once in atleast in every?,4 months,3 months,2 months,1 month,1

89,No woman shall be employed in any mine above ground exept between the hours of..?,6 AM to 7 PM,5 AM to 6 PM,6 AM to 6 PM,5 AM to 7 PM,1

90,Leave with wages are calculated in case of person employed below ground at the rate of one for every ...days of work performed by him?,15,20,30,25,1

91,Leave with wages are calculated in case of person employed above ground at the rate of one for every ...days of work performed by him?,15,20,30,25,2

92,Additional workmen's inspector is required to be nominated to assist the workmen's inspector where the number of persons employed in a mine exceeds?,1000,1200,750,1500,4

93,In case of person employed below ground in a mine if he during the calender year put in not less than ....attendences at the mine is eligible for leave with wages?,190,240,150,300,2

94,The compensatory days of rest to be allowed in any week to any person is?,1,2,3,4,2

95,The penalty for giving fake fitness certificate is?,500 Rs,1000 Rs,100 Rs,200 Rs,4

96,Adult means a person who has completed?,16 th year,18 th year,20 year,23 year,2

97,Where work of the saem is carried out by two or more sets of persons working during different periods of the day each such sets is called.....and each of such periods is called...?,Relay ; Shift,Shift ;Relay,Shift ; worktime,none,1

98,Reportable injury means any injury which involves the enforced absence of the injured person from work for a period of .....?,24 hours,36 hours,72 hours,144 hours,3

99,Any injury which involves the permanant loss of any part or section of the body is called?,Minor injury,Reportable injury,Fatal injury,Serious bodily injury,4

100,Act not to apply which excavation is being made for prospecting purposes only and not more than .....persons are employed on any one day ?,15,20,25,30,2

101,Act not to apply which excavation is being made for prospecting purposes only and the depth of the excavation measured from its highest to its lowest point no where exceeds .... and in coal it is....?,15 m; 6m,10 m ; 6 m, 6 m ;15 m,10 m ; 20 m,3

102,Act not to apply in the extraction of?,Laterite,Limestone,Ordinary clay,All the above,4

103,Act not to apply where it is in opencast working the number of persons employed on any day does not exceed...?,20,40,50,100,3

104,The manager or owner of mine shall before the commencement of any mining operation the notice shall be given to C.I ;controller of indian bureau of mines and district magistrate atleast....before the commencement of the mining operation?,30 days,15 days,7 days,3 months,1

105,The drinking water points shall not be situated within ....of any washing place;urinal or latrine?,6 m,15m,10m,12 m,1

106,A copy of the entries in the register regarding accidents shall be sent by the owner of the mine to the chief inspector on or before....in the year following that to which the entries relate?,20 th jan,20 th feb,20th march,20 th april,1

107,The central govt may direct that accidents other than reportable and serious; which cause bodily injury resulting in the enforced absence from work of the person injured for a period exceeding.....shall be entered in the registry?,12 hours,24 hours,48 hours,72 hours,2

108,If any medical practitionar fails to send a report regarding any disease notified by him;he shall be punished with a maximum fine of....?,25 Rs,50 Rs,75 Rs,100 Rs,2

109,The periods of work of any adult shall be so arranged that ;along with his interval of rest they shall not in any day spread over more than....?,12 hours,24 hours,36 hours,10 hours,1

110,No adult employed below ground in a mine shall be allowed to work for more than ....hours in any week or for more than ..hours in any day?,36 ; 6,48 ; 9,48 ;8 , 50 ;10,3

111,The person employed in a underground mine shall not work more than ....hours including overtime ?,8 ,9,10,12,3

112,No person below.....years of age shall be allowed to work in any mine or part thereof?,16,18,20,23,2

113,Every woman employed in amine above ground shall be allowed an interval of not less than ...hours between temination of employment on any one day the commencement of the next period of employment?,8 ,10,11,12,3

114,A person whose service is commences;in the case of a person employed below ground he has to put in attendence for not less than ....of the toal number of days during the remainder of the calendar year?,1/4,1/3,1/5,1/2,4

115,A person whose service is commences;in the case of a person employed above ground he has to put in attendence for not less than ....of the toal number of days during the remainder of the calendar year?,1/4,1/3,2/3,1/2,3

116,The number of times in which leave may be taken during anyone calendar year shall not exceed?,3,4,5,6,1

117,If any owner fails to submit within ...a draft of bye laws after being called upon to do so by the C.I ;the C.I may propose a draft of such bye laws as appear to him?,1 month,2 months,3 months,4 months,2

118,If a person employed in above ground he shall not work continuously for more than ....before he had an interval for rest of atleast 1/2 an hour?,3 hours,4 hours,5 hours,6 hours,3

119,In opencast working if the depth of excavation is not exceed ....then Mines Act shall not be applied?,6 m,10 m,3 m,15 m,1

120,Mines act comes into force on?,1st july 1952,27th may 1952,15th march 1952,None,3

121,Mine rules comes into force on?,2nd march 1955,2nd july 1955,2nd may 1955,2nd january 1955,2

122,A person appointed to superinted the lowering and raising of persons tools and materials and to to transmit signals at the top of a shaft or incline is called?,Banksman,Onsetter,Trammer,Insetter,1

123,A competent person means he is attained the age of?,18 years,16 years,20 years,23 years,3

124,In moving front of any working place or the inbye end of eny gallery is called?,Heading,Face,Seam,Goaf,2

125,General body of air means the general atmosphere in a seam but not include general atmosphere in.....?,Roof cavities,The sealedoff area,In any bore hole drilled in coal,Both 2 and 3,4

126,According to CMR the landing or platform in a shaft and includes an excavation therefrom between the top and the bottom of the shaft is called?,Inset,Scaffold,Coller,None,1

127,According to CMR a person appointed to superinted the raising and lowering of persons tools and materials and to transmit signlas at any inset or shaft bottom is called?,Banksman,Onsetter,Trammer,Insetter,2

128,According to CMR any place in the mine which has lawful access is called?,Face,Gallery,Working place,Working,3

129,Any excavation made or being made in a mine for search of or obtaining coal is called?,Exploration,Working,Drilling,Boring,2

130,Accroding to CMR;Miner injury means the injury other than serious bodily injury or reportable injury which results in the enforced absence from work of the person injured for period atleast exceeding...?,24 hours,36 hours,18 hours,72 hours,1

131,If a mine already been opened the plans shall be submitted within ...to R.I?,30 days,60 days,90 days,1 year,1

132,If the boundary of mine is changed a plan showing the new boundary shall be submitted within.....to R.I?,7 days,15 days,30 days,3 months,1

133,The owner or manager of shall submit to the C.I and the R.I correct returns in respect of preceding month on or before the.....every month?,10 th day,4 th day,14 th day,24 th day,3

134,The owner or manager shall submit annual reports to D.M adn C.I on or before ....of every year?,20 th may,20th april,20th march,20 th february,4

135,If a mine is abandoned or working thereof is discontinued over a period exceeding 60 days if a change occurs in the owner of mine the annual returns

shall be submitted within.....days abandoment or change of ownership or within ....days of discontinuance?,30 ; 90,60 ;90 ,30 ;60 ,60 ;120,1

136,When it is intended to abandon a mine or seam or to discontinue working therof for a period exceeding 60 days the owner or manager shall not less than .....before such abandonment or discontinuance;give to C.I and R.I?,15 days,30 days,40 days,60 days,3

137,When a mine or seam has been abandoned or the working thereof has been discontinued over a period exceeding 60 days the owner or manager within .....of the abandonment or of expiry of the said period give to the C.I?,7 days,15 days,30 days,40 days,1

138,When it is intended to reopen a mine or seam after abandonment or after discontinuance for a period exceeding 60 days;the owner or manager not less than .....before resumption of mining operations give to the C.I?,7 days,15 days,30 days,40 days,3

139,When a change occurs in the name or ownership of mine or the address of the owner;the owner or manager shall within.....from the date of change give to the C.I?,7 days,15 days,30 days,40 days,1

140,When the employment of person is terminated or such person leaves the employment the manager shall give notive within.....from the day of such termination?,7 days,15 days,30 days,40 days,1

141,The statement in respect of responsibilites of the agent shall be submitted within.....?,7 days,15 days,30 days,40 days,3

142,The owner or manger shall inform to R.I by telephone and shall be give notice within ...of such accident occurance?,12 hours,24 hours,36 hours,48 hours,2

143,The owner or manager shall put a notice an notice board within.....of occurance of accident?,7 days,14 days,30 days,40 days,2

144,Where any person employed in a mine contacts any disease nofified by the central govt;the owner or manager shall within .....of his being informed to the D.M?,24 hours,3 days,2 days,5 days,2

145,Intimation of minor accidents involving atleast .....is required to be sent to the C.I and R.I?,5,6,4,3,1

146,For every meeting of the board not less than ....prior notice intimating place and time of the meeting?,7 days,10 days,15 days,30 days,2

147,No byelaw shall have effect untill.....after the date on which it was so published?,1 month,2 months,3 months,4 months,3

148,Application for an examination conducted by the board shall be made to the board not less than.....prior to the fixed for the examination?,30 days,60 days,15 days,7 days,2

149,No person shall be admitted as a candidate at any examination held by the board unless he is....of age?,20 years,18 years,16 years,23 years,1

150,The fees for grant of first class manager's certificate is.....Rs?,100,75,50,25,1

151,The fees for grant of first class manager's duplicate certificate is.....Rs?,100,5,50,10,2

152,As per CMR the retirement age of a person employed in the mine is?,60 years,62 years,58 years,55 years,1

153,Financial year of the mine means period of 12 months is..?,31 dec to 31 dec,1st day april to 31 st of march,1 st day jan to 31 st dec,none,2

154,No person shall act or be employed as manager unless he is atleast..?,18 years,20 years,23 years,25 years ,3

155,No person shall act or be appointed as manager more than one mine except with the previous permission in writing of the C.I and the permission shall have effect for a period exceeding....?,6 months,12 months,18 months,24 months,2

156,If the mine is producing 3000 te per month then the qualification of the manager is?,First class manager's certificate,A first or second class manager's certificate,Manager's permit,None,1

157,No manager shall vacate his office without giving due notice in writing to the owner or agent atleast....before the day on which he wishes to vacate his office?,7 days,10 days,15 days,30 days,4

158,The owner or manager shall provide suitable residential accomodation for the manager and u/m within a distance of....KM from all mine openings?,4,5,6,7,2

159,In every mine the average monthly output of which exceeds atleast.....the manager shall be assisted in the work by safety officer?,5000,3000,7000,1000,1

160,In every mine the average monthly output of which exceeds atleast.....the manager shall be assisted in the work by undermanager?,5000,3000,7000,1000,3

161,If the mine monthly output is 18000 te then the number of assitant or undermanagers required is?,2,3,4,1,2

162,IN every mine consisting of gassy seams of first degree the average monthly output exceeds .....the manager shall be assisted by ventilation officer?,5000,3000,7000,2500,1

163,In every mine daily supervision shall be exercised by the manager;in case of below ground he shall visit on atleast....in every week?,4 days,3 days,5 days,2 days,1

164,Ventilation officer shall determine the effciency of the main mechanical ventilator once atleast in every....?,day,6 months,3 months,1 year,3

165,The arrangements for the wet cutting at the faces and water spraying at and within.....of the working place are properly done?,30 m,60 m,120 m,90 m,4

166,Where either of the two ways affording means of egress from the district to the surface is not ordinarly used for trevelling once atleast in every.....the whole of such way is examined by sirdar?,7 days,10 days,15 days,30 days,1

167,The surveyor shall record the full facts when workings of the mine have approached to about.....from the mine boundary or from disused or waterlogged workings?,60 m,75 m,90 m,30 m,2

168,When a machine is required to work on gradient exceeding .....an effective contravance to prevent the machine running back shall be provided and used?,1 in 3,1 in 4,1 in 5,1 in 7,3

169,Every plan shall show a scale of the plan atleast .....long?,15 cm,20 cm,25 cm,30 cm,3

170,Every plan in the mine unless otherwise provided be on a scale having R.F of?,2000:1,1200:1,2400:1,1500:1,2

171,The minimum R.F for the OCP mine planes is?,2000:1,1200:1,2400:1,1500:1,1

172,An undergournd plan showing every important surface feature within the boundaries such as railway etc which is within .....of any part of the workings measured on the horizontal plane?,50 m,100 m,150 m,200 m,4

173,An u/g plan where a seam has an average inclination of more than .....from the horizontal;vertical section of mine shall be shown?,15 deg,30 deg,45 deg,60 deg,2

174,The R.F of ventilation plan is?,2000:1,1200:1,2400:1,1500:1,2

175,The R.F of geological plan is?,2000:1,1200:1,2400:1,5000:1,4

176,Combined plans shall be maintained of all seams which are lying within .....of each other and workings in different seams or sections shall be shown in different colurs?,3 m,6 m,9 m,12 m,3

177,The plans maintianed shall show surface contours lines drawn at vertical intervals not exceeding.....?,5 m,3 m,8 m,10 m,1

178,The spot levels in the plans shall at points not more than ....apart?,100 m,150 m,200 m,300 m,2

179,Where it is not possible to show the complete boundary of leasehold on the same plan;an additional 'KEY PLAN' having scale ....shall be shown?,2400 :1,5000 :1,25000 :1,50000:1,4

180,The plans required to show all features both above and below ground of all adjacent mines as are situated within.....?,30 m,60 m,75 m,100 m,2

181,The R.F of the dust plan is?,2000:1,1200:1,2400:1,1500:1,3

182,The R.F of the water danger plan is?,2000:1,1200:1,2400:1,1500:1,2

183,The warning line shall be shown in the plan within a distance of .....of any body of water?,60 m,90 m,120 m,150 m,3

184,The statutory restrication line shall be shown in the plan within a distance of .....of any body of water?,60 m,90 m,120 m,150 m,1

185,When the geological maps of the area or any investigation of local knowledge indicates the existance of unconsolidated surface deposits with the boundary of a mine or within....?,60 m,90 m,120 m,150 m,1

186,The owner or manager shall submit to the C.I two upto date copies of the plans on or before.....every year?,14 th march,20 th febraury,31 st october,2nd july,3

187,Where the shaft is more than .....in depth the arrangements for persons to descend and ascend is by mechanical means?,30 m,60 m,75 m,100 m,1

188,Every ladder in the shaft shall be securely fixed in the shaft at an inclination of nor more than .....from the horizontal?,60 deg,70 deg,80 deg,45 deg,3

189,Shafts and outlets shall not be less than .....distant from one another at any point?,12.5 m,13.5 m,14.5 m,16 m,2

190,Every shaft in the course of being sunk shall be provided with a permanent lining of metal ;concrete which shall at no time be more than ...form the bottom of the shaft?,20 m,5 m,6 m,10 m,3

191,Every shaft in the course of being sunk shall be provided with a permanent lining of steel rings which shall at no time be more than ...form the bottom of the shaft?,20 m,5 m,6 m,10 m,1

192,Every shaft or incline shall be examined once atleast in every.....?,7 days,14 days,1 month,3 months,1

193,When it is intended to bring into use any new winding installation for lowering and raising persons;the owner or manager shall not less than ....before such use give notice to R.I?,30 days,60 days,100 days,120 days,2

194,There shall be atleast .....turns of the rope on the drum when the cage or other means of conveyance is at its lowest working point in the shaft?,2,3,4,5,1

195,In signalling the code for raise the cage is ?,1 rap,2 raps,3 raps,4 raps,1

196,The gap both vertical and horizontal between the protective roofing and the top of cage; when the cage is at the bottom of the shaft; shall not exceed....?,15 cm,30 cm,10 cm,40 cm,1

197,Where winding depth is atleast more than .....two independent means of transmitting signals should be provided?,60 m,100 m,150 m,250 m,3

198,In shafts more than .....in depth overwind switch shall be provided?,60 m,100 m,150 m,250 m,2

199,The space between detaching hook and the detaching bell when the cage or other means of conveyance is at its normal position at the top of the shaft ; shall not less than .... where geared engine used.....where direct engine used?,1.8 m;3.6 m,2.5 m;5 m,3 m;6 m,None,1

200,The decending cage from being landed at the pit bottom or other permanant landing at a speed exceeding....m/sec?,1,1.5,2,3,2

201,If the monthly output of the mine is 35000 te then the number of surveyors required is?,2,3,4,5,2

202,Test of automatic contravance and every brake shall be examined once atleast in every .....by raising each cage to pass the last contrl point above the topmose landing?,7 days,14 days,30 days,2 months,1

203,The floor of the cage ot other means of conveyance and the lowest part of the gae or fence does not exceed .....and that between any two membersof the gate does not exceed .....?,25 cm ;15 cm,15 cm ; 25 cm,30 cm ; 10 cm,10 cm ;30 cm,2

204,The number of the persons fixed in the shaft shall be such as to allow approximately .....sq.m of floor area per person?,0.2,0.4,0.6,0.5,1

205,In a second outlets having depth over .....suitable cage shall be provided for ascending and decseding of persons?,50 m,20 m,40 m,70 m,1

206,If the depth of the shaft is 500 m then the maximum speed of the cage in man winding is....m/sec?,10 ,8 ,7,5.5 ,4

207,If the depth of the shaft is 1000 m then the maximim speed of the cage in man winding is....m/sec?,10 ,8 ,7,5.5 ,2

208,The maximum speed of the rope in man winding in case of depth of the shaft is?,12 m/s,15 m/s,10 m/s,20 m/s,1

209,If the depth of the shaft is 400 m then the maximim speed of the cage in shaft sinking is....m/sec?,1.5,2.5,3,3.5,2

210,If the shaft exceeds ..... in depth;there shall be provided for each bucket or other means of conveyance a detaching hook?,30 m,45 m,60 m,100 m,2

211,The guides may not require in sinking shaft if the depth is less than atleast....?,100 m,200 m,300 m,150 m,4

212,The life of the winding rope is .....years?,2,3.5,5,6,2

213,The length of the tapered portion of the socket if white metal not used ;shall be not less than atleast.....times the diameter of the rope?,12,24,30,8,1

214,The length of the tapered portion of the socket if white metal is used ;shall be not less than atleast.....times the diameter of the rope?,12,24,30,8,4

215,If white metal is used in the capping of ropes its melting point shall not exceed ....deg C and its temparature when poured into the socket shall not exceed ....deg Celcius?,300 ; 363,200 ;263,150 ;300,200 ; 400,1

216,If white metal is used in the capping of ropes the socket shall be heated to a temparature of about.....deg C before the white metal is poured in it?,50,100,200,300,2

217,Except in koepe winding the recapping of ropes shall be done once atleast in every.....?,3 months,6 months,9 months,12 months,2

218,Every detaching bell used in connection with a safety hook shall be examined once in every.....?,30 days,3 months,6 months,12 months,1

219,The life of the cage suspension gear is generally restricted to ?,6 years,10 years,7 years,5 years,1

220,Every passbye so provided shall be not less than atleast.....high?,1.2m,1.5 m,1.8 m,2.5 m,3

221,Where haulage is effected by one or more ropes atleast one runaway switch or other effective contrivance below the first stopblock at a distance greater than the length of.....?,3 tubs,4 tubs,5 tubs,set of tubs,4

222,The distance between the runaway switch and stop block shall not exceed the length of set or train of tubs more than .....?,10 m,5 m,15 m,20 m,1

223,Tub rerailers are provided at intervals of not more than atleast.....?,150 m,200 m,250 m,300 m,3

224,ON every haulage roadway exceeding .....in length ;effective means of transmitting signals shall be provided?,30 m,50 m,100 m,60 m,1

225,Where in any mine below ground a system of haulage roadways extends to a distance of more than ....from the shaft effiecient telephonic communication shall be provided?,30 m,100 m,400 m,600 m,4

226,Where any person is allowed to work or pass while the haulage in motion;manholes for refuge shall be provided at intervals of not more than.....?,10 m,20 m,30 m,40 m,1

227,Where the gradient is less than 1 in 6 manholes may be provided at intervals of not more than atleast.....?,10 m,20 m,30 m,40 m,2

228,Man holes shall be not less than atleast .....in height?,1.5 m,1.8 m,1.0 m,2.5 m,2

229,Every manhole shall be kept clean and clear of obstruction and white washed both inside and for a distance of not less than atleast ....around the aperture?,0.3 m,0.6 m,0.1 m,1 m,1

230,At all places where tubs are coupled or uncoupled there shall be clear space of not less than atleast.....between the tubs and one side of the roadway and also between the adjacent tracks?,0.3 m,0.6 m,2 m,1 m,4

231,When any roadway or face is in direct line with a haulage track and persons may be exposed to danger from runaway tubs.....shall be provided to prevent danger?,Strong buffer,Drop warwick,Rerailer,Runaway switch,1

232,Every traveling roadway shall be not less than atleast.....in height?,1.2m,1.5 m,1.8 m,2.5 m,3

233,Every traveling roadway shall ;where the inclinatio exceeds.....from the horizontal in addition to steps or ladders with hand rails or ropes shall be provided?,30 deg,45 deg,60 deg,80 deg,2

234,When two tubs are in tandom the gap between the inner most ends shall not be less than.....?,20 cm,40 cm,60 cm,80 cm,1

235,Every tub shall be examined once atleast in every.....?,30 days,14 days,7 days,1 day,2

236,Two or more tubs shall not moved by hand when the distance between them at any time is less than atleast.....?,5 m,10m,20 m,30 m,2

237,The diameter of the deflection pulley should not be less than atleast.....times than the rope diameter?,60,100,40,120,1

238,The new haulage rope should have a FOS of atleast.....?,7,9,10,6,2

239,The haulage rope shoud be discarded if...?,FOS less than 7,rope dia is reduced by 15 %or more,the total number of craked or broken wires exceeds 3 over length of lay,All of the above,4

240,Every roadway conveyor shall be so installed that between the conveyor and one side of the roadway;there is a travelling space of atleast.....?,0.5 m,1.5 m,2 m,1 m,4

241,The haulage track shall be examined once atleast in every .....?,30 days,14 days,7 days,1 day,3

242,No locomotive shall be used in where the gradient of the track exceeds atleast.....?,1 in 6,1 in 7,1 in 15,1 in 20,3

243,No road for trucks and dumper shall have a gradient steeper than atleast.....at any place?,1 in 6,1 in 7,1 in 10,1 in 14,4

244,No meterial shall be placed or dumped within atleast.....from either side of the track of rails?,1.2 m,1.5 m,2.5 m,3 m,1

245,Where occupied buildings are situated within atleast.....of any haulage road a substantial fence shall be provided ?,10 m,20 m,30 m,15 m,4

246,In alluvial or coal the sides shall be sloped at an angle of safety not exceeding atleast.....from horizontal?,30 deg,35 deg,45 deg,60 deg,3

247,In alluvial the height of the bench shall not exceed.....?,1.2m,1.5 m,2.5 m,3 m,2

248,In coal the height of the bench shall not exceed.....?,1.2m,1.5 m,2.5 m,3 m,4

249,No tree;loose stone or debris shall be allowed to remain within the distance of .....from the edge or side of the excavation?,1.2m,2.5 m,3 m,4m,3

250,No gallery in a seam or section shall exceed atleast .....in height?,3 m,2.5 m,4.8 m,5.5 m,1

251,No gallery in a seam or section shall exceed atleast .....in width?,3 m,2.5 m,4.8 m,5.5 m,3

252,DGMS recommends that areas having cover less than .....should not be developed?,7.5 m,15 m,10 m,20 m,1

253,During depillaring the pillar shall be splitted upto maximum ....stooks?,2,3,4,6,3

254,WHere the voids formed as a rsult of extraction are stowed with sand; the owner or manager shall on or before ....of every month submit to R.I giving details of stowing?,10 th day,14 th day,5 th day,20 th day,1

255,No caving is permitted where thickness of the hard cover is less than atleast....?,7.5 m,15 m,10 m,20 m,1

256,Extraction of a thickness 't' of the lower seam is permitted by caving when its parting with the upper seam is atleast...?,7t,10t,15t,20t,3

257,A fall is indicated when daily convergence/average dialy convergence ratio equal or more than...?,1,2,3,4,2

258,No combustable material should be dumped within .....of any part of workings belowground even after completion of extraction?,5 m,10 m,15 m,20 m,3

259,Maximum convergence should not exceed ...mm/m in case of sandstone roof and ....mm/m in case of coal or shale roof?,60 ; 45 ,45 ;60 ,30 ;45 ,45 ; 30,1

260,Generally in coal seams having inclination of more than atleast.....the pillars develop a turning moment due to vertical and horizontal forces?,1 in 3,1 in 4,1 in 6,1 in 8,2

261,The stresses created by an opening extend upto a distance which is about....times the height of the opening?,1.3,1.5,1.75,2.1,3

262,No workings shall be made and no work of extraction or reduction of pillars shall be conducted any point within.....of any railway?,30 m,45 m,100 m,60 m,2

263,The provision of SSR shall apply every development working within .....of face and every juction of roadways immediately outbye of a developing face?,10 m,20 m,30 m,15 m,1

264,The hole dia should be more than.....mm larger than bolt dia?,8 to 12,4 to 8,1 to 4,12 to 16,1

265,Where prop is set on sand or other loose material a flat base piece not less than ....in thickness shall be used?,5 cm,10 cm,15 cm,20 cm,1

266,The cogging members shall be not less than .....in length?,2.5 m,1.8 m,1.5 m,1.2 m,4

267,In the workings having an inclination atleast .....or more from the horizontal ;adequate precausions shall be taken to prevent danger to persons from falling?,30 deg,45 deg,60 deg,20 deg,1

268,No person shall work or be permitted to work at any place having an inclination atleast....?,30 deg,45 deg,60 deg,20 deg,2

269,No person shall carry or permitted to carry any load along a road or footpath having inclination of atleast....or more from the horizontal?,30 deg,45 deg,60 deg,20 deg,1

270,Every road or footpath breadth shall not be less than atleast...?,2.5 m,1.8 m,1.5 m,1 m,4

271,Every road or footpath suitable steps shall be provided if the inclination atleast exceed...?,30 deg,45 deg,60 deg,15 deg,4

272,The owner shall atleast once in every.....examine the rate of emission of inflamable gas?,30 days,60 days,100 days,120 days,1

273,All surface structures and supports within a horizontal distance of.....from all entrances to a mine shall be of fire proof material?,5 m,10 m,15 m,20 m,2

274,No person shall light a fire or permite a fire to be lighted in any opencast working or within a distance of.....from any entrace to a mine?,5 m,10 m,15 m,20 m,3

275,All unused workings connected to the surface through a walkable entrance which is not permanantly closed;shall once atleast in every .....be inspected by competent person?,15 days,30 days,60 days,100 days,2

276,The mine air shall be tested for percentage of CO once atleast in every .....?,7 days,15 days,30 days,60 days,1

277,A place shall be called as harmful if the dust concentration exceeds...mg/cu.m?,2,3,4,5,2

278,All results of measurment of airborne respirable dust and all other relevant particulars shall be systamatically recorded within.....of the date of collection of samples?,7 days,14 days,30 days,2 months,2

279,No screening plant shall be placed within atleast.....of the top of downcast shaft?,60 m,50 m,80 m,100 m,3

280,Every working face and the floor; roof and sides of every roadway or airway within .....unless naturally wet thorough out; wetted during work shifts?,50 m,70 m,100 m,150 m,1

281,A mine or part thereof shall be called as naturally wet if the moisture content is atleast ....or more?,20 %,30 %,40 %,60 %,2

282,Stone dust barriers should be provided if the percentage of inflammable gas atleast is .... or more?,4 %,5 %,6 %,7 %,1

283,If the coal containing less than 30 % V.M then the percentage of incombustable matter in stone dust is?,75 %,65 %, 55%,85 %,1

284,If the coal containing more than 30 % V.M then the percentage of incombustable matter in stone dust is?,75 %,65 %, 55%,85 %,4

285,Representive sample dust shall be collected once in every .....?,30 days,60 days,14 days,7 days,1

286,The sample dust shall be sent within .....of taking of each sample?,7 days,14 days,30 days,60 days,1

287,Where any working is extended to within.....of goaf or disused workings containing an accumulation of inflammable gas there shall be maintained atleast one borehole not less than 1.5 m deep in advance of the working?,50 m,70 m,30 m,60 m,3

288,No brick dam shall be less than atleast....in thick?,1.8 m,1.5 m,2 m,2.5 m,1

289,Every mechanical ventilator shall be installed on the surface at a distance of not less than .....from the opening of the shaft or incline at any point?,10 m,20 m,30 m,15 m,1

290,Every stopping between the main intake and main return airway shall be constructed of manosary or brickwork not less than atleast.....in thickness?,15 cm,25 cm,38 cm,50 cm,2

291,If the mine is first or second degree and at the 7.5 m outbye of the discharge end of an air pipe then the velocity of the air is?,30 m/min,15 m/min,60 m/min,45 m/min,2

292,In third degree at the maximum span of the longwall face ;the maximum velocity of the air is?,30 m/min,15 m/min,60 m/min,75 m/min,4

293,Air entering any of the auxiliary fans in the district shall not contain more than atleast....of methane?,0.3 %,0.5 %,0.8 %,1 %,1

294,The percentage of methane in the return air in any heading ventilated by an auxialiary fan shall not exceeed.....?,0.3 %,0.5 %,0.8 %,1 %,2

295,The air samples shall be analysed within ....of the taking thereof?,4 days,7 days,14 days,30 days,1

296,If any determination shows the percentage of inflammable gas to exceed.....determination shall be made or samples of air taken at intervals not exceeding 24 hours?,0.6 %,0.8 %,1 %,1.25 %,2

297,No working or gallery shall be extended to a distance of more than 4.5 m from the nearest ventilation connection unless the current of air is coursed up to a point within.....of the face?,3 m,2 m,4.5 m,6 m,3

298,No narrow main or advance gallery shall be driven more than ..... ahead of the widened gallery?,3 m,2 m,4.5 m,6 m,1

299,The partition between the top and bottom airways shall be of R.C.C not less than .....thick?,15 cm,30 cm,40 cm,60 cm,2

300,The top and bottom of every haulage plane every regular stoping place expect within.....of the face;the roof and sides shall be white washed ?,60 m,50 m,200 m,100 m,4

301,Adequate general lighting arrangement shall be provided in every travelling roadway normally used by .....or more persons during any shift?,50,30,100,60,1

302,General electric lighting may be used on any other roadway or place not within atleast .....of the nearest face?,100 m,200 m,270 m,400 m,3

303,Every depillaring area should be provided with general lighting by a cluster of .....caplamps places on the suitable stand?,10 to 15,5 to 10,15 to 20,20 to 25,3

304,The maximum current of the fuse in caplamp is?,3 amp,2 amp,4 amp,5 amp,3

305,No case or container shall contain more than atleast.....of explosive?,5 kg,10 kg,3 kg,12 kg,1

306,Not more than .....of explosive shall be carried by one person?,5 kg,10 kg,3 kg,12 kg,2

307,Not more than .....detonators are transported in a vehicle at a time?,100,200,300,400,2

308,A vehicle transporing explosives shall not be driven at a speed exceeding....kmph ?,15,20,25,30,3

309,No drill shall be used for boring a shot hole unless it allows a clearance of atleast.....over a diameter or the catridge of explosives?,0.3 cm,0.6 cm,0.5 cm,0.8 cm,1

310,Except in stone drift not more than ....shots shall be fired in any one round?,5,10,15,20,2

311,If the number of shots fired per round is above.....then the shots shall be fired by electrically?,5,10,15,6,4

312,The shot firer shall use well insulated cable of sufficient lengthto permit him to take proper shelter and in no case shall the cable be less than atleast.....long?,15 m,10 m,18 m,25 m,3

313,When two working places belowground have approached within.....of each other the shotfirer shall not fire any shot unless all persons have been withdrawn from the other working place?,3 m,4.5 m,6 m,2 m,2

314,When the shaft or stone drift has reached within a distance of .....of any coal seam the use of non permitted explosives shall be stopped?,10 m,20 m,30 m,15 m,1

315,Arrangement shall be made for suppression of coal dust with water within atleast.....of the face?,60 m,50 m,80 m,100 m,1

316,No solid blasting shall be done when a geological disturbance has been detected or methane exceeds....?,0.3 %,0.5 %,0.8 %,1 %,2

317,The shot firer shall carefully test for inflammable gas at all places within a radius of.....of the place of firing?,12 m,18 m,22 m,25 m,2

318,The protective footwear shall be supplied at intervals of atleast...?,3 months,1 year,2 years,6 months,4

319,Life of the helmet for workers employed in opencast workings is?,2 years,3 years,4 years,5 years,4

320,Notice of opening is given in the form..?,FORM I,FORM II,FORM III,FORM IV,1

321,Monthly retruns shall be maintained in the form..?,FORM I,FORM II,FORM III,FORM IV,2

322,Notice reopening of the mine is given in the form..?,FORM I,FORM II,FORM III,FORM IV,1

323,Notice of accident is given in the form ...?,FORM I,FORM II,FORM III,FORM IV A,4

324,Annual returns shall be in the form of....?,FORM I,FORM II,FORM III,FORM IV,3

325,Perticulars of injured person in the form of..?,FORM I,FORM II,FORM IV A,FORM IV B,4

326,Notice of disease notified in the form of..?,FORM I,FORM II,FORM IV,FORM V,4

327,Particulars of injured person returning to duty is given in the form of...?,FORM IV A,FORM II,FORM IV B,FORM IV C,4

328,The forms for systamatic support rules in the.?,first schedule,Second schedule,Thrid schedule,None,3

329,Extraction of coal by a system other than Bord and Piller system is the form of..?,FORM I,FORM II,FORM III,FORM IV,3

330,No person employed in a public utility service shall go on strike in breach or contract without giving to the employer notice of strike within..?,2 weeks before strike,4 weeks before strike,6 weeks before strike,8 weeks before strike,3

331,No employer carrying on any public utility service shall lockout any of his workmen without giving notice of lock out within..... weeks before lockingout?,2,4,6,8,3

332,No person employed in a public utility service shall go on strike in breach of contract within.....days of giving strike notice?,2,5,7,14,4

333,No programme of safety can be successful unless the company has..?,assistance from DGMS,assistance from state safety council,Internal safety organisation,private safety organisation,3

334,The maximum number of days for vocational training in general..?,6 days,12 days,18 days,20 days,1

335,The maximum number of days for vocational training for working in gassy mines..?,6 days,12 days,18 days,20 days,3

336,Minimum number of persons to form the trade union is..?,5,6,7,8,3

337,Lockout shall not declare during a pending of concilliation proceedings before a concillationn board and before .....after the conclusion of such proceedings?,7 days,14 days,30 days,40 days,1

338,No workmen of an industrial establishment is entitled to a layoff compensation where less than .....workmen on an average per working day herebeen employed in proceding month?,50,100,150,200,1

339,Layoff compensation is paid if he is working below ground and attended .....days in one calendar year ?,190,240,170,250,1

340,The layoff compensation payable to any workman during any period of 12 months shall not be more than .....?,15 days,30 days,45 days,60 days,3

341,The most important function of the management is?,Organisation,Planning,staffing,Controlling,1

342,The maximum span of control is?,1 to 3,4 to 5,5 to 6,7 to 8,3

343,Mining industry is organised by?,Line organisation,Function organisation,LIne and staff organisation,none,3

344,The number of persons under overman of all categories under his charge doesnot exceed?,50,100,200,300,2

345,It is recommanded to oppoint one safety officer in mine exceeding ....man power?,50,100,200,300,2

346,The minimum wages act comes in?,1952,1948,1947,1955,2

349,The money paid to worker in cash without any additional advantages is called?,NOminal wages,Real wages,Minimum wages,Living wages,1

350,Underground allowance is ..... of the basic wage?,10 %,15 %,20 %,5 %,2

351,The wage is paid to labour to raise thier wages equal to the minimum wage for the specified work load in case they fail to fulfill the worknorms?,Fall back wages,Real wages,Minimum wages,Living wages,1

352,Giving additional leave is...?,Financial incentive,Non financial incentive,Negative incentive,incriment,2

353,Vocational training rules comes in?,1956,1966,1976,1946,2

354,Every worker has to go vocational training once in.....years?,3,5,6,4,2

355,No worker shall be absent from work without permission for more than minimum .....days?,10,5,15,20,1

356,punishment as suspension without pay should not exceed...days?,10,5,15,20,1

357,Indian trade union act comes in?,1926,1948,1947,1966,1

358,The termination of the services of a worker by way of disciplinary action is called?,Retrenchment,lockout,dismissal,layoff,3

359,The termination of the services of a worker not by way of disciplinary action is called?,Retrenchment,lockout,dismissal,layoff,1

360,Minimum age for the member in trade union is.....years?,15,16,18,20,1

361,The workmen has been paid at the time of retrenchment compensation equivalent to .....days average pay for every completed year?,15,10,18,20,1

362,No workmen shall declare a lockout during the pendency of the proceedings before a labour court;tribunal and before.....after the concillation of such proceedings?,7 days,2 months,3 months,6 weeks,2

363,Lay off compensation is paid if the workmen worked in below ground for not less than minimum....days?,190,240,300,150,1

364,Notice should be given to workmen before .....when retrenched ?,1 month,2 months,3 months,15 days,1

365,Concillation officer shall send a report to govt. within .....days of start of concillation proceedings?,7,14,30,60,2

366,The court is only an investigatory authority and it submits its report to the govt within.....?,14 days,1 month,3 months,6 months,4

367,Indirect loss is ....times more than the direct loss due to accident?,1,2,3,4,4

368,Board of concillation members are.....?,1 to 2,2 to 4,4 to 6,2 to 8,2

369,A labour court consists of only one person who must have held judicial office in india for not less than ?,3 years,5 years,7 years,10 years,3

370,No person can be appointed as the presiding officer of the Tribunal unless he has been a judge of the highcourt for not less than....?,3 years,5 years,7 years,2 years,4

371,Accident frequency rate is calculated in terms of .....persons employed?,100,1000,10000,100000,2

372,Accident frequency rate is calculated in terms of .....manshifts worked?,100,1000,10000,100000,4

373,Managing for minimising external control and maxmising internal motivation is achieved by?,Proper Functiong,Decentralistion,MBO technique,Line and staff organisation,3

374,Any combination whether temporary or permanant formed primarly for the purpose of regulating the relations btw workman and employers is called?,Trade union,workmen committee,Safety comittee,NOne,1

375,Industrial employment act (1946) is applied to every industrial establishment which employs minimum.....or more persons?,50,100,200,400,2

376,In case of C.I or R.I fails to inspect the place of accident within.....of occurance the work may be resumed?,24 hours,36 hours,48 hours,72 hours,4

377,During the vocational training period each trainee is to be paied an allowance of Rs....per day?,1,1.5,2,2.5,2

378,Industrial tribunals consist of.....?,1 person,2 persons,3 persons,4 persons,1

379,Work's committee is formed employing more than .....workers?,50,100,200,500,2

380,The welfare officer shall be assisted with additional welfare officer for every additional.....persons employed?,1000,2000,5000,500,2

381,If a member of committee leaves india for more than .....he shall tender his resignation?,3 months,6 months,1 year,2 years,2

382,A fee for the manager's permit is.....Rs?,5 ,10,15,20,2

383,Safety classes and safety weeks are organised by?,Safety officer,Vocational training officer,Workmen's inspecter,manager,1

384,Speed of the Main mechanical ventialtor shall be examined once in.....?,a day,7 days,14 days,30 days,1

385,Winding rope shall be test once in ...?,a day,7 days,14 days,30 days,4

386,Inspection of all entrances of the mine is done once in.....?,a day,7 days,14 days,30 days,2

387,All unsued workings which are not sealed off and the isolation stoppings shall be inspected once in.....?,a day,7 days,14 days,30 days,2

388,All equipment provided for the fire fighting are tested once in .....?,a day,7 days,every month,2 months,3

389,Checking of atmosphere behind stoping shall be done once in.....?,a day,7 days,14 days,30 days,4

390,When it is intended to reopen a mine or part thereof;which has been isolated;the manager shalll not less than.....before commencement of such work give notice to R.I?,7 days,14 days,30 days,60 days,2

391,A notice of constuction of the waterdam shall be send within.....?,7 days,14 days,30 days,60 days,2

392,Every mechanical ventilator(Booster) in u/g mine shall be examined once in.....?,7 days,14 days,30 days,60 days,1

393,Quantity of the air shall be calculeted once in.....in deg III mine?,7 days,14 days,30 days,60 days,2

394,Examination of air crossings;ventilation stoppings shall be done once in.....?,7 days,14 days,30 days,60 days,2

395,The temparature and relative humidity of the mine air shall be calculated once in.....?,7 days,14 days,30 days,60 days,3

396,The stone dust shall be tested once in.....?,30 days,3 months,6 months,1 year,3

397,When working near the the waterlogged area the plans are prepared upto date of.....?,15 days,30 days,3 months,1 month,1

398,No person shall be employed in any seam where the outlets or openings of the seam are within.....of an active fire or spantaneous heating in a higher seam or fire on the surface?,30 m,60 m,10 m,100 m,2

399,No person shall be employed where the parting with an overlying seam on fire or in which spataneous heating has taken place consists of less than .....of hard rock?,30 m,60 m,10 m,100 m,3

400,The type of fire extinguisher used in explosive van is?,CTC type,CO2 type,Both 1 and 2,None of the above,3

401,Every depillaring district shall be inspected .....?,on every day,once in 7 days,once in 14 days,on every idle day,4

402,The term of the committee member is.....years?,5,4,3,2,3

403,The term of the office of the elected member of the canteen is .....years?,5,4,3,2,4